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ECONOMIC INDICATORS

Research Department, First Hawaiian Bank | November/December 1990

Outlook for the Hawaiian Economy in 1991

The Hawaiian economy has continued to perform very well in 1990. After a string of high annual real growth rates in the last several years, peaking at 6 percent in 1989, real gross state product growth in 1990 is likely to register very close to the 4 percent forecasted by the Bank this time last year. The outlook for 1991, however, is more unsure and possibly less buoyant than at any time since the last state contraction in 1982—which corresponded to the last U.S. national recession. This does not mean the state is expected to experience negative growth in 1991. The 1991 forecast will seem low only in comparison to the state's own performance in recent years, not low compared to the outlook for the nation or for that matter much of the global economy.

As the Outlook is published, there are several sources of uncertainty. The national economy is expected to be entering its first recession in eight years, bringing its longest postwar peacetime expansion to an end. There are still indications that this recession will be a mild one—possibly two or three quarters of negative growth, with no contraction on an annual basis. A weak U.S. dollar exchange rate will help exports. The national economy is also more service oriented, and therefore less vulnerable to cyclical swings. Even in the manufacturing sector, there is little inventory build-up induced by weak demand.

Those expecting a more severe downturn point to the economy's now large debt overhang. The corporate and consumer debt build-up in the latest expansion could, beyond a point, make the downturn worse. Government debt is also high, and fiscal policy lacks the flexibility to offset private sector weakness.

The volatile Mideast situation, with the threat of much higher oil prices if war erupts, is another wild card. The Hawaiian economy is vulnerable because of the higher oil price impact on the national economy, higher airfares, and higher inflation here generally. A near term spike in oil prices—followed by a subsequent decline on resolution of Mideast problems, increased oil production elsewhere, and lower demand—would not be nearly as harmful as sustained higher prices resulting from a prolonged war, perhaps aggravated by a cold world winter. Our most likely scenario sees oil prices falling substantially as 1991 goes on.

At current levels the U.S. dollar may be undervalued against other major currencies, and as always exchange rates will fluctuate. On average, however, the dollar will remain weak against the yen and other currencies in 1991. As long as the Bank of Japan continues its campaign against asset inflation there with higher interest rates, while at the same time the Federal Reserve is pressured to lower dollar interest rates to boost a weak U.S. economy, national monetary policies—not purchasing power parity—will be the overriding influence. Only political instability and a resurgence of the dollar's safe haven role will reverse the current trend. The anemic dollar will boost Japanese and other tourism expenditures in the state, while it encourages mainland visitors not to travel abroad and perhaps substitute Hawaii as a destination. And while Hawaii is not invulnerable to financial and real estate weakness in Japan, a strong yen will also help offset forces bringing about slower Japanese investment.

The Japanese economy will cool in 1991, but will continue its strong growth. If further real estate weakness develops there, a controlled and gradual value drop in line with official desires to curb speculation is more likely than a freefall. Any Japanese slowdown will derive more from corporate losses impacting investment than from negative wealth effects on consumer sentiment.

For Hawaii, the above external conditions will lead to relatively flat westbound visitor count growth in 1991, but eastbound visitor growth will continue its strong pace. Japanese tourism to Hawaii is encouraged by official policy, and will be underpinned by previous Japanese investment here. While shares are still quite small, the westbound count will be boosted some by European visitors, whose economies are still relatively healthy, just as the eastbound count will draw some strength from non-Japanese growth elsewhere in the Pacific Rim.

The construction sector will continue its importance to state growth in 1991. Much of this growth will come from adding or updating infrastructure. Public contract growth now leads private permit value growth considerably. For the latter, moderate residential and relatively flat commercial construction growth is expected.

Regarding other sectors of the Hawaiian economy, defense will continue to provide a stabilizing influence, just as the agriculture sector will on balance continue to hold its own. Neither sector will contribute much to overall growth, however.

All these influences lead us to forecast a growth rate in real gross state product of 2.5 percent in 1991. The two main pillars of that growth will be eastbound tourism and public construction activity. If such a growth rate materializes, it will be the lowest for the state since the 1982 recession. Given the external conditions outlined above, however, this economic growth is quite respectable. Hawaii continues to be a dynamic state economy with remarkable long run potential.

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NOVEMBER/DECEMBER FEATURE STORY: GUAM'S ECONOMIC BOOM

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CURRENT BUSINESS TRENDS

Even though the U.S. real gross national product expanded by 1.7 percent in the third quarter, 1990, most economists now expect a recession. As anticipated, the national inflation rate, as measured by the Consumer Price Index, rose by a 10-percent annualized rate mainly due to higher energy costs as a result of Middle East tensions. Weak national growth and higher inflation do not bode well for some sectors of the state economy in 1991.

For Hawaii, economic growth so far has remained relatively solid. Gross business receipts through the third quarter increased by 15 percent to $31 billion. The first-half Honolulu Consumer Price Index for 1990 rose by 7 percent. Even with the prospects of higher inflation in the second half due to higher energy costs, the State economy would still have real economic growth.

Tourism is headed for another good year. The total visitor count was ahead by 5 percent to 5.3 million visitors through September 1990 over the same period last year. The impetus to this growth is the higher spending eastbound market. The eastbound count was ahead by 13 percent to 1.7 million visitors.

The westbound market is being impacted by the slower growing U.S. economy. Performance of the westbound market has picked up some during the past several months, however, the cumulative visitor count through September was ahead by only 1 percent to 3.6 million visitors. As an added negative, the September's westbound average length of stay (9.1 days) was at one of the lower levels of the year. This lackluster performance is likely to continue.

Westbound tourism on Oahu increased by a marginal 1-percent to 2.4

u. s. economic indicators

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
GROSS NATIONAL PRODUCT**					
In Current Dollars	bil. $	3rd Qtr.	5,514p	1.3	5.3
In 1982 Dollars	bil. $	3rd Qtr.	4,174p	0.4	1.1
PERSONAL INCOME**	bil. $	September	4,697p	0.5	6.5
INTEREST RATES					
AVERAGE PRIME RATE	percent	October	10.00	0.0	−4.8
CONSTRUCTION					
CONSTRUCTION PUT IN PLACE**	bil. $	August	442.5p	0.0	2.0
CONSTRUCTION COST INDEXES:					
Residences	1982 = 100	July	131.7	0.8'	3.4
Apts., Hotels, Office Bldgs.	1982 = 100	July	128.0	0.8'	2.6
EMPLOYMENT					
CIVILIAN EMPLOYMENT*	thous.	September	117,898	0.2	0.4
UNEMPLOYMENT*	thous.	September	7,069	0.9	7.0
UNEMPLOYMENT RATE*	percent	September	5.6	1.8	5.7
PRICES					
CONSUMER PRICE INDEXES:					
Wage Earners and Clerical Workers	1982-84 = 100	September	131.1	0.9	6.1
All Urban Consumers	1982-84 = 100	September	132.7	0.8	6.2
PRODUCER PRICE INDEXES:					
Finished Goods*	1982 = 100	September	120.9p	1.6	6.0
All Commodities	1982 = 100	August	116.5p	1.9	4.0

r = revised.
p = preliminary.
'Compared to May, 1990
**Seasonally adjusted.*
***Seasonally adjusted at annual rates.*

business activity in hawaii

BUSINESS SALES					
GROSS BUSINESS RECEIPTS:					
STATE	mil. $	Jan.-Sept.	31,252.5	.....	15.1
Oahu	mil. $	Jan.-Sept.	26,557.3	.....	14.4
Maui County	mil. $	Jan.-Sept.	1,926.9	.....	20.9
Hawaii	mil. $	Jan.-Sept.	2,055.4	.....	18.3
Kauai	mil. $	Jan.-Sept.	712.9	.....	18.2
DIVERSIFIED MANUFACTURING	mil. $	Jan.-Sept.	571.4	.....	13.6
DIVERSIFIED AGRICULTURE	mil. $	Jan.-Sept.	246.1	.....	2.1
RETAILING	mil. $	Jan.-Sept.	10,355.9	.....	11.7
WHOLESALING	mil. $	Jan.-Sept.	8,161.7	.....	14.3
SERVICES	mil. $	Jan.-Sept.	7,248.7	.....	16.0
OAHU NEW CAR SALES	number	Jan.-Sept.	34,446p	.....	9.7
HONOLULU PRICES					
HONOLULU CONSUMER PRICE INDEX:					
Wage Earners and Clerical Workers	1982-84 = 100	1st half 1990	136.3	3.3'	7.0
All Urban Consumers	1982-84 = 100	1st half 1990	135.5	3.4'	7.2
TOURISM					
VISITOR EXPENDITURES	mil. $	1989	10,907p	.....	18.6
OVERNIGHT OR LONGER VISITORS	number	September	523,450p	−24.2	5.6
	number	Jan.-Sept.	5,286,240p	.....	4.8
ORGANIZED GROUP TOURS	number	Jan.-Sept.	486,750p	.....	−5.2
WESTBOUND VISITOR COUNT					
State	number	September	352,050p	−22.8	4.5
	number	Jan.-Sept.	3,603,660p	.....	1.3
Oahu	number	September	244,690p	−21.9	4.5
	number	Jan.-Sept.	2,437,630p	.....	0.7
Maui County	number	September	151,730p	−19.8	3.2
	number	Jan.-Sept.	1,511,910p	.....	−6.7
Hawaii	number	September	70,960p	−18.0	1.0
	number	Jan.-Sept.	737,330p	.....	4.3
Kauai	number	September	92,670p	−13.3	1.9
	number	Jan.-Sept.	850,800p	.....	−2.5
Average Daily Census	number	September	107,210p	−21.1	6.3
Average Length of Stay	no. of days	September	9.1p	−2.2	1.1

p = preliminary. *'Compared to 2nd half 1989*
e = estimated. *n.a. = not available.*

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
COUNTY EASTBOUND VISITORS					
State	number	September	171,400p	−27.3	7.9
	number	Jan.-Sept.	1,683,380p	.....	13.3
Oahu	number	September	166,190p	−27.0	n.a.
	number	Jan.-Sept.	1,629,080p	.....	n.a.
Maui County	number	September	36,690p	−18.2	n.a.
	number	Jan.-Sept.	286,470p	.....	n.a.
Hawaii	number	September	11,520p	−47.1	n.a.
	number	Jan.-Sept.	153,140p	.....	n.a.
Kauai	number	September	9,960p	−38.9	n.a.
	number	Jan.-Sept.	124,740p	.....	n.a.
Average Daily Census	number	September	34,850p	−22.4	n.a.
Average Length of Stay	no. of days	September	6.1p	3.4	n.a.
VISITOR ACCOMMODATIONS:					
STATE	number	Feb. 1989	68,189	.....	−1.2
Oahu	number	Feb. 1989	36,739	.....	−2.9
Waikiki	number	Feb. 1989	32,743	.....	−2.7
Maui (Island)	number	Feb. 1989	15,444	.....	5.8
Molokai	number	Feb. 1989	574	.....	1.2
Lanai	number	Feb. 1989	10	.....	0.0
Hawaii	number	Feb. 1989	8,171	.....	−7.4
Kauai	number	Feb. 1989	7,251	.....	1.0
HOTEL OCCUPANCY:					
STATE	percent	September	74.4	−13.1	−0.8
		Jan.-Sept.	80.4	.....	0.6
Oahu	percent	September	83.0	−9.6	−2.1
		Jan.-Sept.	87.8	.....	0.3
Maui (Island)	percent	September	64.1	−17.9	6.5
		Jan.-Sept.	72.0	.....	2.1
Hawaii	percent	September	51.2	−23.7	0.4
		Jan.-Sept.	62.7	.....	2.3
Kauai	percent	September	65.6	−17.2	−2.7
		Jan.-Sept.	69.2	.....	−4.2
DEFENSE EXPENDITURES					
APPROPRIATED FUNDS TOTAL	mil. $	Yr. to 1st Qtr.	567.0	.....	12.5
Military Payroll	mil. $	Yr. to 1st Qtr.	262.6	.....	14.2
Civilian Payroll	mil. $	Yr. to 1st Qtr.	171.3	.....	−3.0
Local Purchases	mil. $	Yr. to 1st Qtr.	133.1	.....	36.7
SUGAR					
VALUE OF UNPROCESSED CANE	mil. $	1989	210.3	.....	0.2
SUGAR PRODUCTION	thous. tons	Jan.-Sept.	674.3	.....	−1.9
AVERAGE N. Y. RAW SUGAR PRICE	$/ton	Jan.-Sept.	467.4	.....	3.0
PINEAPPLE					
VALUE OF CROP (Farm Gate)	mil. $	1989	95.4	.....	−11.1
FRESH	thous. lbs.	Jan.-Sept.	187.3	.....	−8.6
DIVERSIFIED AGRICULTURE					
CROPS	thous. $	1989	271,351	.....	5.7
FLOWERS & NURSERY PRODUCTS	thous. $	1989	62,295	.....	4.6
Anthurium Outshipments*	th. dozens	Jan.-Aug.	495.1	.....	−22.7
Potted Foliage Plants	thous. $	1989	14,575	.....	17.3
FRUITS & NUTS	thous. $	1989	68,019	.....	10.6
Papaya Sales	th. lbs.	Jan.-Sept.	43,500	.....	−5.6
Average Farm Price	cents/lb.	September	23.0	−14.8	16.2
Macadamia Nut Sales (in shell)	th. lbs.	1989	44,945	.....	9.8
Average Farm Price	cents/lb.	1989	89.0	.....	−1.1
VEGETABLES AND MELONS	th. lbs.	Jan.-Sept.	49,925	.....	4.3
LIVESTOCK	thous. $	1989	91,769	.....	3.5
BEEF PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-Sept.	22,048	.....	−16.7
Average Farm Price (Feedlot Beef)	cents/lb.	September	91.5	0.5	−2.1
HOG PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-Sept.	4,733	.....	2.6
Average Farm Price	cents/lb.	September	102.0	−1.0	−2.9
MILK PRODUCTION	mil. lbs.	Jan.-Sept.	116.0	.....	−1.5
Average Price Sold to Plants	$/100 lbs.	September	20.71	0.0	−0.7
EGG PRODUCTION	mil.	Jan.-Sept.	171.2	.....	1.4
Average Farm Price	cents/doz.	September	83.5	−0.6	3.7
PUBLIC UTILITIES					
ELECTRICITY GENERATED	mil. kwh.	Jan.-Sept.	6,586	.....	4.2
GAS SALES	th. therms	Jan.-Sept.	40,917	.....	4.6
TELEPHONE LINES IN SERVICE	thous.	September	578.8	.....	5.6

p = *preliminary.*
**From Hawaii County.*

million visitors. Of the neighbor island counties, the Big Island was still showing growth, helped by the attraction of the Kilauea eruption. Its westbound visitor count was ahead by 4 percent. Maui and Kauai experienced declines of 7 and 3 percent, respectively.

The construction industry is also headed for another solid growth year. Construction put-in-place rose by 29 percent to $3 billion through September. As an indicator of future construction activity, total private building permits overall were ahead over last year. Residential permits rose by 4 percent through September to $905 million, but non-residential permits were even at $547 million.

Oahu's permits were mixed; residential permits increased by 2 percent to $448 million while non-residential permits decreased by 10 percent to $287 million. On the Big Island, both the residential and non-residential construction sectors are expected to be robust; residential and non-residential permits were ahead by 27 and 14 percent, respectively, to $206 and $123 million. For September, the Big Island issued $74 million in non-residential permits, mainly due to new hotel projects. Also for Kauai, both residential and non-residential permits were ahead by 9 and 59 percent, respectively, to $111 and $55 million. Only Maui County experienced an overall decline; residential and non-residential permits were down by 17 and 7 percent, respectively, to $141 and $83 million.

Public-sector construction is expected to be strong. Government contracts awarded increased by 30 percent to $586 million through the third quarter. All counties experienced increases.

The real estate market is cooling off; for example, the pace of resales is not as robust as last year. Single-family home and condominium unit resales through September were ahead by 1 and 4 percent, respectively, to 3,279 and 5,944 units. The Maui County and Big Island markets fueled this growth. Sales of Maui single-family homes and condominium units increased by 8 and 23 percent, respectively. Big Island sales of single-family and condominium units were up by 22 and 60 percent, respectively.

While transactions are slowing, prices are still increasing. The average single-family and condominium prices increased by 35 and 33 percent, respectively, to $399,148 and $222,564. The average price of single-family homes increased the most on Maui (54 percent) to $438,208. In the condominium market, the greatest price increase occurred on Oahu (40 percent) to $224,414.

GUAM'S ECONOMIC BOOM

The Territory of Guam has an economy that is, on the surface, similar to Hawaii's. Tourism, construction, and the military are leading sectors. Guam is also dealing with growing pains such as a labor shortage, strained infrastructure, and soaring real estate prices. However, Guam's economy is less diversified and is more dependent on Japanese private-sector influences than Hawaii. Fortunately, these conditions have set the stage for continued economic growth.

Guam is strategically located in the Western Pacific to accrue the benefits of the robust Asian/Pacific economies and American defense initiatives. In size, Guam is a little smaller than Molokai, with 209 square miles of area. This island territory is located 7 hours 40 minutes by air (3,700 miles) away from Honolulu, but 3 hours 30 minutes by air (1,500 miles) away from Tokyo. Being a resource-poor island, economic growth is fueled by exports and capital inflows. Its proximity to Japan allows Guam to be the recipient of Japanese capital and trade, much like Hawaii has been.

Guam's economic expansion is in its seventh year. Gross business receipts amounted to $1 billion in 1982, which more than tripled by 1989. Total deposits at financial institutions, another measure of economic growth, rose from $450 million in 1982 to $1.1 billion in 1989. Government finances have benefitted from this vigorous economic growth; this year, Guam gave its government employees $5,440 per year raises, its retirees $1,800 in cost of living adjustments, and its tax filers $1,000 to $2,000 in rebates.

An outcome of this surging economy is a tight labor market. In June 1990, the unemployment rate stood at 3.9 percent, versus 4.2 percent in June 1989 and 5.3 percent in June 1988. The total payroll employment rose by 9 percent to 54,950 jobs from June 1989 to June 1990, and the average weekly hours in private sectors increased from 36.4 hours to 38.1 hours over the same period.

The labor situation is further hampered by U.S. immigration policies. The visitor industry may be especially impacted since the hotel room inventory is expected to more than double in several years. Most hotel jobs are classified as permanent positions, and the industry cannot fill its ranks with temporary foreign workers. In construction, however, its jobs are temporary, and the ranks can be filled by foreign workers with an H-2 temporary work visa. Total foreign workers in Guam with the H-2 visa increased by 92 percent to 4,644 workers in the first half of 1990.

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
CONSTRUCTION PUT IN PLACE					
STATE	thous. $	Jan.-Sept.	3,017,905	.....	29.4
Oahu	thous. $	Jan.-Sept.	2,510,562	.....	24.9
Maui County	thous. $	Jan.-Sept.	195,075	.....	47.5
Hawaii	thous. $	Jan.-Sept.	242,001	.....	72.5
Kauai	thous. $	Jan.-Sept.	70,267	.....	42.6
HONOLULU CONSTRUCTION COST INDEXES					
SINGLE FAMILY	1982 = 100	September	152.3	2.6	9.3
HIGH-RISE	1982 = 100	September	150.2	2.7	11.8
PRIVATE PERMITS AUTHORIZED					
STATE: RESIDENTIAL	thous. $	Jan.-Sept.	905,457	.....	3.8
Single Family Units	number	Jan.-Sept.	4,419	.....	−1.1
Multiple Family Units	number	Jan.-Sept.	1,949	.....	−28.2
NONRESIDENTIAL	thous. $	Jan.-Sept.	547,131	.....	−0.4
OAHU: RESIDENTIAL	thous. $	Jan.-Sept.	447,529	.....	2.3
Single Family Units	number	Jan.-Sept.	1,495	.....	5.9
Multiple Family Units	number	Jan.-Sept.	882	.....	−43.3
NONRESIDENTIAL	thous. $	Jan.-Sept.	286,750	.....	−10.0
MAUI CO.: RESIDENTIAL	thous. $	Jan.-Sept.	141,067	.....	−17.3
Single Family Units	number	Jan.-Sept.	785	.....	−2.4
Multiple Family Units	number	Jan.-Sept.	402	.....	−42.6
NONRESIDENTIAL	thous. $	Jan.-Sept.	83,144	.....	−6.7
HAWAII: RESIDENTIAL	thous. $	Jan.-Sept.	206,314	.....	27.1
Single Family Units	number	Jan.-Sept.	1,422	.....	−16.4
Multiple Family Units	number	Jan.-Sept.	570	.....	37.0
NONRESIDENTIAL	thous. $	Jan.-Sept.	122,509	.....	14.3
KAUAI: RESIDENTIAL	thous. $	Jan.-Sept.	110,549	.....	8.9
Single Family Units	number	Jan.-Sept.	717	.....	29.7
Multiple Family Units	number	Jan.-Sept.	95	.....	126.2
NONRESIDENTIAL	thous. $	Jan.-Sept.	54,729	.....	59.4
PUBLIC CONTRACTS AWARDED					
STATE	thous. $	Jan.-Sept.	586,111	.....	29.5
Oahu	thous. $	Jan.-Sept.	420,082	.....	24.4
Maui County	thous. $	Jan.-Sept.	73,241	.....	65.1
Hawaii	thous. $	Jan.-Sept.	45,765	.....	206.7
Kauai	thous. $	Jan.-Sept.	47,020	.....	136.5
BY LEVEL OF GOVERNMENT:					
Federal	thous. $	Jan.-Sept.	47,664	.....	−23.9
State	thous. $	Jan.-Sept.	433,355	.....	89.5
County	thous. $	Jan.-Sept.	104,641	.....	−35.1
REAL ESTATE RESALES					
STATE: Single Family	number	Jan.-Sept.	3,279	.....	1.1
Average Price	dollars	Jan.-Sept.	399,148	.....	35.0
Condominium	number	Jan.-Sept.	5,944	.....	3.6
Average Price	dollars	Jan.-Sept.	222,564	.....	33.3
OAHU: Single Family	number	Jan.-Sept.	1,808	.....	−7.6
Average Price	dollars	Jan.-Sept.	494,160	.....	41.9
Condominium	number	Jan.-Sept.	4,199	.....	−3.6
Average Price	dollars	Jan.-Sept.	224,414	.....	39.5
MAUI CO.: Single Family	number	Jan.-Sept.	410	.....	7.9
Average Price	dollars	Jan.-Sept.	438,208	.....	54.3
Condominium	number	Jan.-Sept.	1,068	.....	22.5
Average Price	dollars	Jan.-Sept.	254,027	.....	25.6
HAWAII: Single Family	number	Jan.-Sept.	873	.....	21.8
Average Price	dollars	Jan.-Sept.	199,210	.....	14.4
Condominium	number	Jan.-Sept.	483	.....	59.9
Average Price	dollars	Jan.-Sept.	155,172	.....	−0.5
KAUAI: Single Family	number	Jan.-Sept.	188	.....	−1.1
Average Price	dollars	Jan.-Sept.	328,702	.....	39.6
Condominium	number	Jan.-Sept.	194	.....	−7.2
Average Price	dollars	Jan.-Sept.	177,112	.....	10.1

p = preliminary

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population in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
POPULATION					
STATE:					
Total De Facto Population	thous.	July 1, 1989	1,263.0	.....	3.6
Total Resident Population	thous.	July 1, 1989	1,112.1	.....	1.3
OAHU:					
Total De Facto Population	thous.	July 1, 1989	916.2	.....	1.5
Total Resident Population	thous.	July 1, 1989	841.6	.....	0.4
MAUI COUNTY:					
Total De Facto Population	thous.	July 1, 1989	139.6	.....	11.7
Total Resident Population	thous.	July 1, 1989	97.2	.....	4.5
HAWAII:					
Total De Facto Population	thous.	July 1, 1989	138.0	.....	9.3
Total Resident Population	thous.	July 1, 1989	122.3	.....	4.1
KAUAI:					
Total De Facto Population	thous.	July 1, 1989	69.3	.....	6.8
Total Resident Population	thous.	July 1, 1989	51.0	.....	3.4
CIVILIAN RESIDENT POPULATION					
STATE	thous.	July 1, 1989	1,055.7	.....	1.6
MILITARY PERSONNEL					
STATE	number	July 1, 1989	56,370	.....	−12.0
Ashore	number	July 1, 1989	53,263	.....	−12.1
Afloat	number	July 1, 1989	3,107	.....	−9.5
CIVILIAN MILITARY DEPENDENTS	number	July 1, 1989	60,274	.....	−13.8
FOREIGN IMMIGRATION[1]	number	Jan.-Sept.	5,013	.....	22.0

p = preliminary.
[1]Includes only those entering Honolulu ports and does not include status changes.

income in hawaii

INCOME					
TOTAL PERSONAL INCOME**	mil. $	2nd Qtr.	22,025p	1.6	8.5
EMPLOYMENT INCOME[1]	mil. $	2nd Qtr.	16,849p	1.8	9.0
Manufacturing	mil. $	2nd Qtr.	676p	1.0	1.5
Construction & Mining	mil. $	2nd Qtr.	1,397p	−2.9	13.7
Wholesale	mil. $	2nd Qtr.	660p	0.8	8.7
Retail	mil. $	2nd Qtr.	1,964p	0.9	8.3
Finance, Ins., & Real Estate	mil. $	2nd Qtr.	1,261p	3.2	14.5
Trans., Comm., & Util.	mil. $	2nd Qtr.	1,405p	2.6	10.9
Services	mil. $	2nd Qtr.	4,769p	3.9	11.6
Farm & Other	mil. $	2nd Qtr.	337p	−0.9	8.4
Federal Civilian	mil. $	2nd Qtr.	1,120p	0.4	3.1
Federal Military	mil. $	2nd Qtr.	1,426p	−1.5	2.4
State & Local	mil. $	2nd Qtr.	1,835p	4.8	12.2
PROPERTY INCOME (Dividends, Interest, & Rent)	mil. $	2nd Qtr.	3,388p	1.1	6.2
TRANSFER PAYMENTS ($2,802 minus personal contributions for social insurance $1,136)	mil. $	2nd Qtr.	1,789p	0.7	8.3
PER CAPITA PERSONAL INCOME					
STATE	dollars	1989	18,472	.....	9.7
Oahu	dollars	1988	17,450	.....	7.0
Maui County	dollars	1988	15,279	.....	7.7
Hawaii	dollars	1988	13,331	.....	7.7
Kauai	dollars	1988	14,093	.....	9.6

***Total personal income and all components are seasonally adjusted at annual rates.*
[1]Includes wage and salary disbursements, proprietors' income, and other labor income.
p = preliminary.

AWAIIAN BANK

Tourism leads growth. Tourism has been the pervasive im[illegible]o Guam's growing economy. Like [illegible], tourism displaced the military as the largest industry. Being an export industry, tourism created a net inflow of capital through foreign development of hotels.

Even with uncertainty caused by the Middle East tension and the forecasted U.S. recession, Guam's tourism industry is expected to be relatively recession-proof. Guam is a close and reasonably priced U.S. destination for Japanese travelers. The industry was catering to the middle-income, single and newly married Japanese visitor market, but is now catering to a higher income market. Guam will have two new upscale hotels by the end of 1991 (the Palace Hotel and Nikko Hotel), and 7 new golf courses by 1993. A Guam vacation may increasingly become a substitute for a Hawaii vacation, especially in an economic slowdown.

The Japanese share of the total visitor market over the past 10 years averaged 83 percent. The U.S. market was the second largest with a 7-percent share of the count. During the 1980s, the Japanese market grew relative to the other markets. However, markets from other Asian countries are expected to grow. Guam expects to attract more Korean visitors since a visa waiver program is in place and hopes that Taiwan will be added to that program.

Guam tourism in future years may get a boost from the Commonwealth of the Northern Mariana Islands. Tinian, a short plane ride away, recently allowed casino gambling, and plans are being made with prospective casino operators. Guam will benefit with the potential overflow traffic especially since its visitor infrastructure is in place.

For now, tourism growth is limited by the shortage of hotel rooms. Guam had a 90-percent occupancy rate for 1989. However, the occupancy rate has surpassed 100 percent on some days because rooms may be sold twice during the day due to airline schedules to and from Japan. There are some concerns about the overdependence on the Japanese market. Most of the hotels are Japanese owned and travel plans are arranged in Japan. Guam has approved the construction of 11,500 additional rooms by 1993. Only about 6,000 rooms will probably be constructed, but, this will still more than double the current visitor room inventory.

The surging visitor market has led to increasing hotel room occupancy tax collections. With 4,133 visitor units in 1989 and a 14-percent growth in the number of tourists to 668,748 visitors, tax collection increased by 33 percent

to $12 million. Through September, 1990, the tax amounted to $11 million, 24 percent higher than a year ago.

Military exerts stabilizing influence. The military also has been an important sector. Total appropriations rose by 7 percent in 1989. As with Hawaii, the military exerts a visible, but declining influence on the economy as compared with other sectors. However, due to the island's strategic location, Guam could benefit if military base negotiations with the Philippines result in a pull-back of the U.S. armed forces from that country.

In December 1989, the U.S. government deactivated the 43rd Bomb Wing, eliminating the B-52s at Andersen Air Force Base. The effect was a drawdown of about 2,000 personnel. However, the Navy's presence remains solid. Of the total civilian personnel employed by the Department of Defense, 79 percent were employed by the Navy.

Impact of robust growth. Guam's economic growth has led to some growing pains. For example, the local residential real estate market is tight, with the average single-family unit price estimated at $210,000, up from an estimated $160,000 to $170,000 last year. In the commercial market, the economy has been able to absorb all new retail and office spaces.

Economic growth also has placed a burden on infrastructure and utilities. For the mid-term, Guam's water supply is sufficient, but the concern is with water distribution. Distribution lines need updating to control line-losses, and $53 million in bonds were issued for that purpose. In waste treatment, the Agana treatment plant is operating at capacity, and a sewer-reversal project is planned to divert waste to an underutilized northern plant. The northern plant is also expected to be expanded in anticipation of future growth. With electric power generation, growth has taxed capacity. However, a 23-megawatt generator should be installed by May 1991 to help with emergency and peak-load demand. While the roads have become more congested, Guam has reconstructed and updated 50 percent of its main traffic artery, Route 1; total update should cost $50 million.

Future development is bright. Much development has already occurred on Guam. However, in spite of some over-development concerns, the island has room for more construction. Most of the developments over the past few years have taken place around the perimeter of the island, with tourism developments making up the bulk of building permit values. The island's interior land

employment and jobs in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
EMPLOYMENT					
STATE:					
Civilian Labor Force	thous.	September	532.4p	−1.5	3.1
Employment	thous.	September	517.7p	−1.7	2.3
Unemployment	thous.	September	14.7p	9.3	42.9
Unemployment Rate	percent	September	2.8p	12.0	40.0
OAHU:					
Civilian Labor Force	thous.	September	388.8p	−1.5	2.7
Employment	thous.	September	378.9p	−1.9	2.0
Unemployment	thous.	September	10.0p	12.4	41.1
Unemployment Rate	percent	September	2.6p	18.2	36.8
MAUI COUNTY:					
Civilian Labor Force	thous.	September	56.4p	−1.7	4.5
Employment	thous.	September	54.8p	−1.9	3.5
Unemployment	thous.	September	1.7p	9.7	61.9
Unemployment Rate	percent	September	3.0p	11.1	50.0
HAWAII:					
Civilian Labor Force	thous.	September	59.3p	−0.7	4.6
Employment	thous.	September	57.2p	−0.7	3.7
Unemployment	thous.	September	2.1p	0.0	35.5
Unemployment Rate	percent	September	3.6p	2.9	33.3
KAUAI:					
Civilian Labor Force	thous.	September	28.0p	−1.4	1.5
Employment	thous.	September	27.0p	−1.6	0.0
Unemployment	thous.	September	0.9p	0.0	50.0
Unemployment Rate	percent	September	3.3p	3.1	57.1
JOB COUNT BY INDUSTRY					
TOTAL JOBS — STATE	thous.	September	563.2p	−1.1	2.5
Oahu	thous.	September	428.6p	−1.2	2.2
Maui County	thous.	September	52.9p	−1.4	3.8
Hawaii	thous.	September	54.5p	0.0	4.1
Kauai	thous.	September	27.3p	−0.9	0.4
SUGAR (Mill and Field)	thous.	September	5.6p	−1.8	−2.6
PINEAPPLE (Cannery and Field)	thous.	September	3.3p	−9.6	0.0
DIVERSIFIED MANUFACTURING (Excluding Sugar and Pineapple)	thous.	September	16.7p	−0.9	−2.3
Durable Goods	thous.	September	4.1p	−2.4	−4.7
Non-Durable Goods	thous.	September	12.7p	−0.8	−1.9
Apparel and Textiles	thous.	September	2.2p	−2.3	−14.0
DIVERSIFIED AGRICULTURE (Excluding Sugar And Pineapple, but including Agricultural Self-employed)	thous.	September	9.4p	2.7	10.7
CONTRACT CONSTRUCTION	thous.	September	29.4p	0.3	−5.3
TRANSPORTATION	thous.	September	31.6p	0.6	2.8
COMMUNICATION	thous.	September	7.4p	−0.7	0.0
UTILITIES	thous.	September	2.8p	0.0	0.0
RETAIL TRADE	thous.	September	111.5p	−0.9	0.5
WHOLESALE TRADE	thous.	September	22.6p	−0.2	2.0
FINANCE, INSURANCE AND REAL ESTATE	thous.	September	36.3p	0.0	2.7
HOTEL SERVICES — STATE	thous.	September	38.2p	−0.3	3.4
Oahu	thous.	September	19.6p	−0.5	4.0
Maui County	thous.	September	8.9p	−0.6	11.3
Hawaii	thous.	September	5.9p	0.9	0.0
Kauai	thous.	September	3.9p	0.0	−8.3
OTHER SERVICES	thous.	September	113.2p	−0.2	4.0
FEDERAL GOVERNMENT	thous.	September	33.7p	−1.0	0.0
Civilian Agencies	thous.	September	14.5p	−1.7	5.9
Defense Department	thous.	September	19.2p	−0.5	−3.5
STATE GOVERNMENT	thous.	September	49.5p	−5.3	4.2
COUNTY GOVERNMENT	thous.	September	14.3p	−9.5	0.7
NON-AGRICULTURE SELF-EMPLOYED	thous.	September	38.0p	−0.4	12.6

p = preliminary

public assistance in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
PUBLIC ASSISTANCE					
UNEMPLOYMENT INSURANCE					
Insured Unemployment (Wkly Avrg)	number	September	5,757	3.8	21.0
Intrastate Initial Claims	number	Jan.-Sept.	41,294	.....	17.9
Interstate Initial Claims	number	Jan.-Sept.	2,245	.....	8.5
Unemployment Insur. Benefits	thous. $	Jan.-Sept.	37,893	.....	20.1
INCOME MAINTENANCE:					
Recipients[1]	no. persons	September	52,948	1.4	1.8
Payments	thous. $	Jan.-Sept.	96,597	.....	12.5
MEDICAL ASSISTANCE:					
Recipients[1]	no. patients	September	45,537	−11.1	−9.8
Payments	thous. $	Jan.-Sept.	168,884	.....	17.1
FOOD STAMPS:					
Recipients[1]	no. persons	August	78,951	0.1	−0.2
Payments	thous. $	Jan.-Aug.	53,791	.....	10.1
SERVICES:					
Recipients[1]	no. cases	2nd Qtr.	7,021	16.0	4.9
Payments	thous. $	2nd Qtr.	8,485	.....	−12.1

[1]*Count of recipients is duplicated. A person may be counted in each category.*

banking and finance in hawaii

	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
FINANCE					
COMMERCIAL BANK DEPOSITS:					
STATE:					
Total Deposits	mil. $	September	12,763.1	17.3	17.1
Debits To Demand Deposits	mil. $	September	18,391.5	−6.8	16.3
OAHU:					
Total Deposits	mil. $	September	10,558.7	−0.4	17.5
Debits To Demand Deposits	mil. $	September	16,944.3	−5.7	16.7
MAUI:					
Total Deposits	mil. $	September	891.8	−0.8	12.5
Debits To Demand Deposits	mil. $	September	632.7	−16.1	9.5
HAWAII:					
Total Deposits	mil. $	September	890.4	−2.9	18.4
Debits To Demand Deposits	mil. $	September	554.1	−18.5	19.3
KAUAI:					
Total Deposits	mil. $	September	422.2	1.5	15.0
Debits To Demand Deposits	mil. $	September	260.4	−17.7	2.8
BANK LOANS OUTSTANDING—STATE	mil. $	2nd Qtr.	8,601.3	3.7	17.1
Real Estate	mil. $	2nd Qtr.	4,142.5	6.4	19.0
Consumer	mil. $	2nd Qtr.	1,312.8	1.5	8.3
Commercial & Industrial	mil. $	2nd Qtr.	2,535.4	3.1	20.7
Other	mil. $	2nd Qtr.	502.7	1.1	18.7
CONVENTIONAL HOME MORTGAGE RATES: HONOLULU	percent	September	9.7	−1.5	−5.5
TAX COLLECTIONS:[1]					
STATE	thous. $	Jan.-Sept.	1,936,077	.....	6.4
Oahu	thous. $	Jan.-Sept.	1,686,049	.....	7.2
Maui County	thous. $	Jan.-Sept.	108,419	.....	−5.1
Hawaii	thous. $	Jan.-Sept.	97,066	.....	−1.6
Kauai	thous. $	Jan.-Sept.	44,540	.....	2.2

[1]*Taxes collected by the State Department of Taxation. Excludes property taxes which were formerly collected by the State but now collected by the Counties.*

is left for development.

The outlook for construction remains bright. Residential developments for the local market will continue. There is also growth potential in executive style homes since the growing economy has been attracting managerial and professional people to Guam. Resort development is expected to continue.

Outlook. Concerns are sometimes voiced that Guam's economic growth is a bubble that could burst due to its extreme reliance on the Japanese economy. Like Hawaii, the tourism's impact would be difficult to replace. However, tourism's importance would likely increase in the future. Expanding the visitor base into other markets such as Korea, Taiwan, and other Asia/Pacific countries would be a solution.

For the near-term at least, continued expansion of the Guam economy is expected. The impetus to growth is Japan's economy, and its outlook is relatively solid. Guam's economy will still be the envy of many for at least the next several years.

THE COMMONWEALTH OF NORTHERN MARIANAS

North of Guam, the Commonwealth of the Northern Mariana Islands (CNMI) is experiencing robust economic growth. Saipan is its capital and Tinian and Rota are the other major islands. As with Guam, tourism is fueling economic growth and construction activity. According to the preliminary 1990 census, population more than doubled from a decade ago to 43,555 persons.

CNMI's growth constraint is with infrastructure. On Saipan, while a major concern is with inadequate sewer treatment, a contract was awarded to build a 1.5- to 2-million gallon per day sewer treatment plant which would handle 2 year's worth of growth. For water, both the distribution and the source are constraints. However, plans are being made to dam the Talafofo River to handle the needs of an additional 70,000 people; completion is expected in 30 months. Electric generation capacity concerns is being addressed by adding generation units. Fortunately, the labor market is not as much a constraint as it is on Guam; CNMI has its own immigration policy because it is a commonwealth.

CNMI benefits from its proximity to Japan for capital inflows to fuel development and for a tourism market. CNMI has 2,500 hotel rooms, most of which are on Saipan. Over 2,000 hotel units have been approved for development.

On CNMI, tourism is the leading sector. The growth of the tourism industry has generated a construction boom. The stage is set for Guam-like growth.

ECONOMIC INDICATORS

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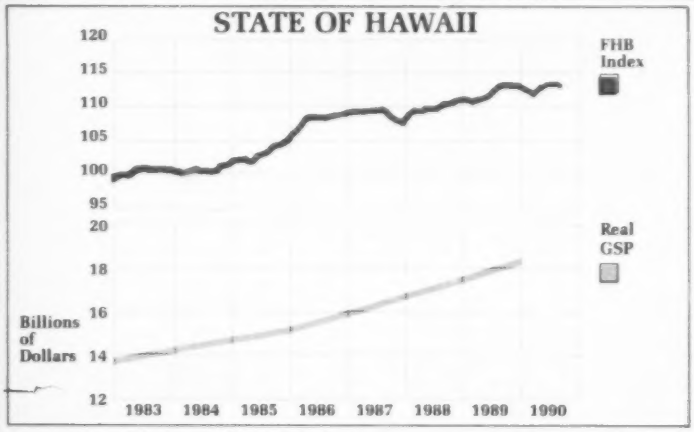

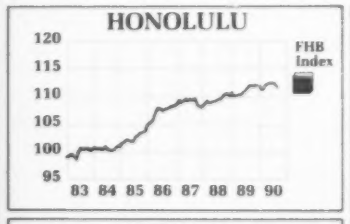

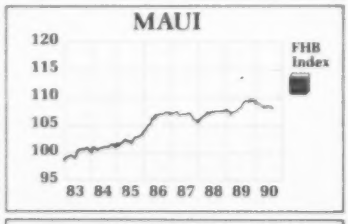

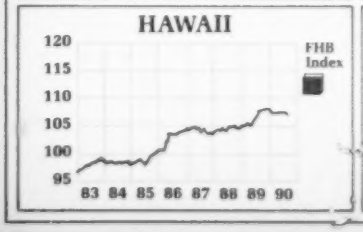

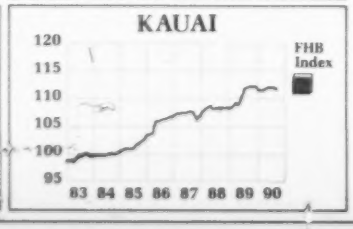

FIRST HAWAIIAN BANK INDEX OF LEADING ECONOMIC INDICATORS

The First Hawaiian Bank Index of Leading Economic Indicators registered a 0.4-percent decline for September. This is the second consecutive decline for the index, which is primarily being impacted by the Middle East situation and concerns of a weak U.S. economy. The inflation and Hawaii-stock components declined by 2.9 and 2.4 percent, respectively, drawing down the index during a month of, otherwise, healthy gains in the average-workweek-hour, private-construction, initial-unemployment-insurance claims and tourism indicators. The other declining components were the public-construction, credit-demand and money-supply indicators; the interest-rate indicator remained unchanged. All county indexes decreased. For Honolulu County, the rising components were the tourism, private-construction and average-workweek-hour indicators. For Maui County, the tourism and credit-demand indicators increased. The rising components for Hawaii County were the private-construction and tourism indicators. For Kauai County, the credit-demand, public-construction and tourism indicators showed strengths.

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ECONOMIC INDICATORS

Research Department, First Hawaiian Bank | January/February 1991

Income Distribution in Paradise

It is often noted that Hawaii's spectacular economic growth has created ample jobs, but that these are mostly low income ones. Many assert not enough higher income jobs are being created by our state's growth, which is now driven mainly by tourism services.

A perceived contrast between rich and poor is reinforced by a relatively low level of home ownership in a state with housing costs among the highest in the nation, and by high inflation generally. An "aspirations gap" can emerge when poorer income classes observe more affluent neighbors they can never hope to imitate. This can seriously aggravate social tensions.

Just how unequal is the distribution of income in Hawaii? How is it changing over time? The conventional shorthand measure of income distribution is a *Gini ratio*—named for the Italian statistician Corrado Gini, who originated it 80 years ago. (Basic economics texts detail how it is computed.) This ratio can range between zero and one. A value of zero means complete income equality, where every household in society earns exactly the same income. A value of 1.0 indicates total inequality of incomes, where one household receives all the income and everyone else gets nothing. Of course, in reality each national or state economy falls somewhere between these extremes.

The distribution of income does not necessarily correspond to its average level. Low Gini ratios may be computed for very poor economies and high ratios for richer ones, or vice versa. But high ratios are usually found in economies with large concentrations of the poor and a few very rich, with not many middle income households.

Internationally, Gini ratios are lower in countries in which the rich are taxed heavily to benefit the poor. Examples are Britain and Sweden where the Gini falls below .300. Socialist economies also have low ratios; East Germany registers below .200. The ratio is much higher in developing economies where great poverty coexists with a small affluent class; several Latin American economies have ratios rising to the .700-.800 range.

In 1990, for the first time in a number of years, the U.S. Internal Revenue Service published tax return data by income class and also by state, which enables a comparison across the states of income inequalities within each one. First Hawaiian's Research Department has computed the Gini ratio for each state from this new data. Selected states are compared in the table. It does seem true that the relative equality of incomes across individuals within each state is not related at all to the average income in that state, but a few generalizations can be made. Big states with more urban populations have the most uneven income distributions. More rural states and some largely suburban ones show greater equality.

Hawaii now ranks 32nd on the list of the 50 states in income equality among its residents. Yet income here is still more equally distributed than the national average. The larger and more populous states—such as New York, California, and Texas—tend to have greater concentrations of both rich and poor. Their income inequalities are greater than Hawaii's, and they raise the national average Gini ratio. Other states—relatively low average income Alaska, Louisiana, and Mississippi as well as the higher average income District of Columbia, Nevada, and Florida—also have more skewed distributions of income.

In Hawaii, income inequality has shifted over the years. In 1929, the Gini was .513, just below what it is now. By 1959 statehood, income distribution had become more equal (.428); a broader segment of the postwar population had more education and was earning more. Since, there has been a steady drift toward inequality. In 1970, Hawaii's Gini stood at .441, on its way to the most recently computed .519. This is an 18% increase in two decades.

INCOME DISTRIBUTION IN SELECTED STATES* COMPARED TO HAWAII

(Average Adjusted Gross Tax Income in Parentheses)

Higher Gini Ratios (Descending)		Lower Gini Ratios (Ascending)	
Alaska ($21,825)	.636	West Virginia ($22,749)	.476
Texas ($25,694)	.564	Maine ($24,327)	.484
Florida ($27,697)	.547	Indiana ($25,527)	.494
Nevada ($29,311)	.546	North Carolina ($24,618)	.498
California ($30,652)	.539	Michigan ($28,353)	.500
Washington, DC ($30,123)	.534	Iowa ($23,299)	.506
New York ($32,587)	.535	New Jersey ($34,238)	.513
Louisiana ($22,584)	.532	Georgia ($26,738)	.517
Mississippi ($20,062)	.520	Connecticut ($37,027)	.518
Hawaii ($27,308)		.519	
National Average ($27,769)		.526	

* *Other states are available upon request from the Research Department, First Hawaiian Bank.*

Hawaii's trend toward greater income inequality only mirrors a well-documented national tendency over the same period, however. Since 1970 the national Gini has moved from .428 to its present .526—a larger 23% increase. So in fact, Hawaii actually had a slightly less equal distribution of incomes than the nation in 1970 and now it has a slightly more equal distribution. Transition to a service economy has been a major underlying factor in national as well as local trends.

Income distribution in Hawaii will continue to be watched closely. While income inequalities can cause controversy, policy attempts to redistribute income massively in a short time are even more controversial and are economically inefficient. Yet relative to the nation and most major states, income inequality here is not so great now as some might believe. The nation actually has experienced a more pronounced trend toward greater income inequality than Hawaii has in the past 20 years. ■

FIRST HAWAIIAN BANK
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JANUARY/FEBRUARY FEATURE STORY: MEASURING HAWAII'S EXPOSURE TO EXCHANGE RATE CHANGES

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MEASURING HAWAII'S EXPOSURE TO EXCHANGE RATE CHANGES

One new component of First Hawaiian's revised index of leading economic indicators introduced in this issue is a trade-weighted exchange rate index. Such an index is designed to capture the impact of changes in foreign purchasing power on the state economy. As such, it is quite important in its own right.

Hawaii's economy in recent years has become increasingly affected by international influences. In tourism, visitors from Japan have increased from around 8 percent of the total annual visitor count in 1970 to 20 percent in 1990. Likewise, visitor counts from other Pacific nations and Western Europe have exploded lately. Yet Hawaii's income from abroad is not limited to the visitor industry. The state's merchandise sales to foreign purchasers rose 462 percent in the last ten years.

This growing exposure to the world means that foreign exchange rate fluctuations play an increasingly important role in state economic activity. The Japanese yen more than doubled its value against the U.S. dollar from early 1985 to late 1988. It was not just coincidence that Japanese investment here soared during this same period, driving up real estate values at the same time it promised economic growth. Japanese tourists and their expenditures also grew apace over the interval. This is quite understandable if the cost of a Hawaii vacation for them was cut in half.

Since exchange rates were allowed to float independently against each other in the free market beginning in the early 1970s, their gyrations have been wide even over short periods. In this environment, the weighted exchange rate index has emerged as a summary measure

u. s. economic indicators

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
GROSS NATIONAL PRODUCT**					
In Current Dollars	bil. $	3rd Qtr.	5,514.6r	1.3	5.3
In 1982 Dollars	bil. $	3rd Qtr.	4,170.0r	0.4	1.0
PERSONAL INCOME**	bil. $	November	4,710.5p	0.3	5.4
INTEREST RATES					
AVERAGE PRIME RATE	percent	December	9.50	−5.0	−9.5
CONSTRUCTION					
CONSTRUCTION PUT IN PLACE**	bil. $	October	434.4p	1.3	1.2
CONSTRUCTION COST INDEXES:					
Residences	1982 = 100	September	132.5	0.6[1]	3.0
Apts., Hotels, Office Bldgs.	1982 = 100	September	128.7	0.5[1]	2.5
EMPLOYMENT					
CIVILIAN EMPLOYMENT*	thous.	November	117,261	−0.4	−0.5
UNEMPLOYMENT*	thous.	November	7,355	4.0	10.6
UNEMPLOYMENT RATE*	percent	November	5.8	3.6	9.4
PRICES					
CONSUMER PRICE INDEXES:					
Wage Earners and Clerical Workers	1982-84 = 100	December	132.2	0.0	6.1
All Urban Consumers	1982-84 = 100	December	133.8	0.0	6.1
PRODUCER PRICE INDEXES:					
Finished Goods*	1982 = 100	November	122.8	0.5	7.0
All Commodities	1982 = 100	November	120.1	−0.6	6.6

r = revised.
p = preliminary.
[1]Compared to July, 1990.
**Seasonally adjusted.*
***Seasonally adjusted at annual rates.*

business activity in hawaii

BUSINESS SALES					
GROSS BUSINESS RECEIPTS:					
STATE	mil. $	Jan.-Nov.	37,839.2	.....	13.0
Oahu	mil. $	Jan.-Nov.	32,167.6	.....	12.0
Maui County	mil. $	Jan.-Nov.	2,312.0	.....	19.9
Hawaii	mil. $	Jan.-Nov.	2,495.1	.....	17.5
Kauai	mil. $	Jan.-Nov.	864.6	.....	19.1
DIVERSIFIED MANUFACTURING	mil. $	Jan.-Nov.	680.4	.....	11.6
DIVERSIFIED AGRICULTURE	mil. $	Jan.-Nov.	294.5	.....	−0.6
RETAILING	mil. $	Jan.-Nov.	12,462.6	.....	10.2
WHOLESALING	mil. $	Jan.-Nov.	9,968.1	.....	11.0
SERVICES	mil. $	Jan.-Nov.	8,663.3	.....	13.8
RETAIL CAR SALES					
State	number	Jan.-Nov.	4,213	.....	−2.5
Oahu	number	Jan.-Nov.	3,185	.....	0.0
Maui	number	Jan.-Nov.	425	.....	0.5
Hawaii	number	Jan.-Nov.	418	.....	−9.3
Kauai	number	Jan.-Nov.	185	.....	−26.9
HONOLULU PRICES					
HONOLULU CONSUMER PRICE INDEX:					
Wage Earners and Clerical Workers	1982-84 = 100	1st half 1990	136.3	3.3	7.0[1]
All Urban Consumers	1982-84 = 100	1st half 1990	135.5	3.4	7.2[1]
TOURISM					
VISITOR EXPENDITURES	mil. $	1989	10,907p		18.6
OVERNIGHT OR LONGER VISITORS	number	November	540,850p	n.a.	3.9
	number	Jan.-Nov.	6,360,200p	.....	4.9
ORGANIZED GROUP TOURS	number	Jan.-Nov.	606,020p	.....	−3.6
WESTBOUND VISITOR COUNT					
State	number	November	377,300p	1.7	−2.1
	number	Jan.-Nov.	4,352,010p	.....	1.0
Oahu	number	November	254,180p	0.1	−7.2
	number	Jan.-Nov.	2,945,610p	.....	0.0
Maui County	number	November	160,820p	2.1	−4.7
	number	Jan.-Nov.	1,830,260p	.....	−6.5
Hawaii	number	November[e]	77,500p	−9.1	−2.4
	number	Jan.-Nov.	900,050p	.....	3.7
Kauai	number	November	87,880p	−7.4	−2.4
	number	Jan.-Nov.	1,033,560p	.....	−2.6
Average Daily Census	number	November	120,390p	.....	8.8
Average Length of Stay	no. of days	November	9.6p	.....	9.1

p = preliminary. *e = estimated.* *[1]Compared to 2nd half 1989.* *n.a. = not available.*

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
COUNTY EASTBOUND VISITORS					
State	number	November	163,550p	0.9	21.2
	number	Jan.-Nov.	2,008,990p	.....	14.6
Oahu	number	November	159,200p	2.0	n.a.
	number	Jan.-Nov.	1,944,350p	.....	n.a.
Maui County	number	November	26,260p	−15.6	n.a.
	number	Jan.-Nov.	343,850p	.....	n.a.
Hawaii	number	November	15,180p	−0.7	n.a.
	number	Jan.-Nov.	183,600p	.....	n.a.
Kauai	number	November	13,130p	0.7	n.a.
	number	Jan.-Nov.	150,910p	.....	n.a.
Average Daily Census	number	November	31,950p	0.0	n.a.
Average Length of Stay	no. of days	November	5.9p	−3.3	n.a.
VISITOR ACCOMMODATIONS:					
STATE	number	Feb. 1990	72,237	.....	6.2
Oahu	number	Feb. 1990	37,270	.....	2.2
Waikiki	number	Feb. 1990	33,558	.....	2.3
Maui (Island)	number	Feb. 1990	17,361	.....	12.4
Molokai	number	Feb. 1990	443	.....	−20.8
Lanai	number	Feb. 1990	365	.....	3550.0
Hawaii	number	Feb. 1990	8,952	.....	9.7
Kauai	number	Feb. 1990	7,846	.....	6.1
HOTEL OCCUPANCY:					
STATE	percent	November	77.6	1.4	−0.1
		Jan.-Nov.	79.8	.....	0.6
Oahu	percent	November	84.7	2.7	0.7
		Jan.-Nov.	87.1	.....	0.6
Maui (Island)	percent	November	69.6	3.0	0.6
		Jan.-Nov.	71.4	.....	1.9
Hawaii	percent	November	62.5	−4.1	3.1
		Jan.-Nov.	62.9	.....	2.9
Kauai	percent	November	66.0	−6.4	−6.4
		Jan.-Nov.	69.1	.....	−4.3
DEFENSE EXPENDITURES					
APPROPRIATED FUNDS TOTAL	mil. $	Yr. to 3rd Qtr.	1,553.3[2]	.....	−0.6
Military Payroll	mil. $	Yr. to 3rd Qtr.	737.7[2]	.....	1.8
Civilian Payroll	mil. $	Yr. to 3rd Qtr.	488.1[2]	.....	−5.2
Local Purchases	mil. $	Yr. to 3rd Qtr.	327.5[2]	.....	1.3
SUGAR					
VALUE OF UNPROCESSED CANE	mil. $	1989	210.3	.....	0.2
SUGAR PRODUCTION	thous. tons	Jan.-Nov.	797.3	.....	−3.4
AVERAGE N. Y. RAW SUGAR PRICE	$/ton	Jan.-Nov.	466.60p	.....	2.5
PINEAPPLE					
VALUE OF CROP (Farm Gate)	mil. $	1989	95.4	.....	−11.1
FRESH	thous. lbs.	Jan.-Nov.	223,101	.....	−10.2
DIVERSIFIED AGRICULTURE					
CROPS	thous. $	1989	271,351	.....	5.7
FLOWERS & NURSERY PRODUCTS	thous. $	1989	62,295	.....	4.6
Anthurium Outshipments[1]	th. dozens	Jan.-Nov.	718.8	.....	−18.7
Potted Foliage Plants	thous. $	1989	14,575	.....	17.3
FRUITS & NUTS	thous. $	1989	68,019	.....	10.6
Papaya Sales	th. lbs.	Jan.-Nov.	54,210	.....	−7.3
Average Farm Price	cents/lb.	November	20.0	−5.3	23.5
Macadamia Nut Sales (in shell)	th. lbs.	1989	44,945	.....	9.8
Average Farm Price	cents/lb.	1989	89.0	.....	−1.1
VEGETABLES AND MELONS	th. lbs.	Jan.-Nov.	57,306	.....	2.7
LIVESTOCK	thous. $	1989	91,769	.....	3.5
BEEF PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-Nov.	27,081	.....	−15.5
Average Farm Price (Feedlot Beef)	cents/lb.	November	93.5p	−0.5	0.0
HOG PRODUCTION (Dressed Wt.)	th. lbs.	Jan.-Nov.	5,851	.....	3.7
Average Farm Price	cents/lb.	November	104.5p	1.5	0.5
MILK PRODUCTION	mil. lbs.	Jan.-Nov.	139.2	.....	−1.5
Average Price Sold to Plants	$/100 lbs.	November	20.77	−0.6	−1.0
EGG PRODUCTION	mil.	Jan.-Nov.	208.0	.....	0.1
Average Farm Price	cents/doz.	November	86.0	1.2	3.0
PUBLIC UTILITIES					
ELECTRICITY GENERATED	mil. kwh.	Jan.-Nov.	8,100	.....	4.2
GAS SALES	th. therms	Jan.-Nov.	50	.....	4.0
TELEPHONE LINES IN SERVICE	thous.	November	584.8	.....	5.6

p = preliminary.
[2]Does not include 2nd and 3rd quarter Air Force expenditures.
[3]From Hawaii County.

of the dollar's value. This enables someone to make a statement like "the dollar depreciated two percent on a trade-weighted basis in December 1990" without detailing how it performed against each individual currency involved. A number of trade-weighted exchange rate indexes are now computed and published by government agencies and banks at the national level, and several have been computed on a state or regional basis. Until now, none has been calculated for Hawaii.

Why a Weighted Average Approach? Focusing on only one currency can be misleading, even for Hawaii's situation where the Japanese yen is obviously so important. Hawaii's exposure to other countries has increased also, and it is quite possible for the yen to be moving one direction against the U.S. dollar while other currencies are moving the other direction. In the last half of 1990, for example, the yen was appreciating against the U.S. dollar, but the currencies of some of Hawaii's other major trading partners—including Canada, Australia, New Zealand, and the Philippines—were depreciating against it. The net effect depends on the value of transactions with each country and the magnitude of individual currency swings. This net effect is what a trade-weighted exchange rate index measures.

Incorporating Price Level Changes. Simply watching quoted exchange rates for various individual currencies against the dollar can be deceiving for other reasons. One is inflation in the involved country relative to local inflation. If the price level in Japan doubles, but the market simply adjusts the yen/dollar exchange rate so the dollar buys twice as many yen, the relative purchasing power of the yen versus the dollar has remained constant. We need to correct exchange rates for inflation in various countries for appropriate measurement. Doing so produces a *real* exchange rate index.

Distortions introduced by inflation can be particularly severe if inflation rates in the involved countries are high. This is more important with respect to some of Hawaii's trading partners than others, even though neither the export nor the import partner list includes any hyperinflationary economy such as those found in Latin America. While Japanese inflation has remained under 3 percent recently, Korea's has exceeded 9 percent and the Philippines' rate has hovered around 12 percent.

Adjustment of the index for inflation involves another data decision, however -choosing appropriate price deflators. GNP deflators from the national accounts

are not available frequently enough to be of any use. Export or import price indexes capture the prices of goods actually traded, but they exclude prices of potentially tradable goods and services. Wholesale price indexes are usually dominated by traded goods, too; these indexes also vary in coverage across countries, sometimes weighting basic commodities heavily at the expense of manufactured items. Consumer price indexes are the most appropriate choice because they provide a broad measure of the prices of domestically produced goods and services, and they are also usually available on a consistent and timely basis across countries.

The Currency Mix. The next decision to be made in constructing the index involves currency coverage. A trade-weighted index should include those currencies that dominate trade flows in goods and services with the relevant economy. But what about investment flows? Using investment as a criterion instead of trade could lead to a much different currency mix, or at least to different weights. An example of a currency often included at the national level because of its investment and not its trade attributes is the Swiss franc. Even though U.S. trade with Switzerland is quite small, the Swiss franc is considered important enough as a financial and investment currency that it usually makes the list.

Related to a currency's investment role is the depth of the market in which it is traded. Currencies that are traded in a well-developed foreign exchange market are better for inclusion, other things equal, because movement in their value more continuously reflects market forces than currencies that are fixed to something else and only thinly traded. Major floating currencies can be influenced by national monetary authorities through official intervention, but the rate is largely market-determined. Developing country currencies that are fixed to another unit may show no movement at all until a suddenly administered devaluation or revaluation occurs.

In Hawaii's case, limiting the list to ten currencies has the appeal of simplicity, but this also allows inclusion of all of the state's major trading partners. No explicit attempt has been made to incorporate investment flows in the weights calculated below. The composition of foreign investment by nationality for the state would be quite difficult to calculate separately, but it is reasonable to assume that investment shares are about the same as the computed trade shares.

business activity in hawaii [cont.]

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
CONSTRUCTION PUT IN PLACE					
STATE:	thous. $	Jan.-Nov.	3,745,003	.....	27.6
Oahu	thous. $	Jan.-Nov.	3,105,670	.....	23.0
Maui County	thous. $	Jan.-Nov.	240,377	.....	41.1
Hawaii	thous. $	Jan.-Nov.	312,413	.....	76.9
Kauai	thous. $	Jan.-Nov.	86,543	.....	38.1
HONOLULU CONSTRUCTION COST INDEXES					
SINGLE FAMILY	1982 = 100	November	151.4	−0.3	8.1
HIGH-RISE	1982 = 100	November	149.1	−0.3	10.0
PRIVATE PERMITS AUTHORIZED					
STATE: RESIDENTIAL	thous. $	Jan.-Nov.	1,106,932	.....	8.0
Single Family Units	number	Jan.-Nov.	5,285	.....	−6.3
Multiple Family Units	number	Jan.-Nov.	2,696	.....	−14.9
NONRESIDENTIAL	thous. $	Jan.-Nov.	772,618	.....	13.3
OAHU: RESIDENTIAL	thous. $	Jan.-Nov.	543,826	.....	9.1
Single Family Units	number	Jan.-Nov.	1,664	.....	5.4
Multiple Family Units	number	Jan.-Nov	1,245	.....	−33.6
NONRESIDENTIAL	thous. $	Jan.-Nov.	354,860	.....	−18.0
MAUI CO.: RESIDENTIAL	thous. $	Jan.-Nov.	187,683	.....	−6.4
Single Family Units	number	Jan.-Nov.	996	.....	−3.0
Multiple Family Units	number	Jan.-Nov.	712	.....	−12.3
NONRESIDENTIAL	thous. $	Jan.-Nov.	212,549	.....	111.7
HAWAII: RESIDENTIAL	thous. $	Jan.-Nov.	247,465	.....	24.5
Single Family Units	number	Jan.-Nov.	1,813	.....	−20.3
Multiple Family Units	number	Jan.-Nov.	630	.....	46.5
NONRESIDENTIAL	thous. $	Jan.-Nov.	144,648	.....	28.7
KAUAI: RESIDENTIAL	thous. $	Jan.-Nov.	127,959	.....	0.7
Single Family Units	number	Jan.-Nov.	812	.....	6.8
Multiple Family Units	number	Jan.-Nov.	109	.....	109.6
NONRESIDENTIAL	thous. $	Jan.-Nov.	60,562	.....	66.5
PUBLIC CONTRACTS AWARDED					
STATE	thous. $	Jan.-Nov.	789,169	.....	11.6
Oahu	thous. $	Jan.-Nov.	543,406	.....	−7.5
Maui County	thous. $	Jan.-Nov.	147,364	.....	146.2
Hawaii	thous. $	Jan.-Nov.	48,878	.....	101.3
Kauai	thous. $	Jan.-Nov.	49,519	.....	39.1
BY LEVEL OF GOVERNMENT:					
Federal	thous. $	Jan.-Nov.	111,589	.....	−8.6
State	thous. $	Jan.-Nov.	535,981	.....	28.3
County	thous. $	Jan.-Nov.	141,148	.....	−15.7
REAL ESTATE RESALES					
STATE: Single Family	number	Jan.-Nov.	3,823	.....	−5.0
Average Price	dollars	Jan.-Nov.	394,283	.....	28.6
Condominium	number	Jan.-Nov.	6,830	.....	−3.1
Average Price	dollars	Jan.-Nov.	224,130	.....	33.7
OAHU: Single Family	number	Jan.-Nov.	2,097	.....	−14.0
Average Price	dollars	Jan.-Nov.	492,092	.....	35.5
Condominium	number	Jan.-Nov.	4,773	.....	−10.9
Average Price	dollars	Jan.-Nov.	227,802	.....	40.0
MAUI CO.: Single Family	number	Jan.-Nov.	490	.....	5.2
Average Price	dollars	Jan.-Nov.	417,111	.....	41.8
Condominium	number	Jan.-Nov.	1,282	.....	20.8
Average Price	dollars	Jan.-Nov.	249,541	.....	23.4
HAWAII: Single Family	number	Jan.-Nov.	1,019	.....	15.8
Average Price	dollars	Jan.-Nov.	197,211	.....	12.5
Condominium	number	Jan.-Nov.	551	.....	41.3
Average Price	dollars	Jan.-Nov.	152,834	.....	3.6
KAUAI: Single Family	number	Jan.-Nov.	217	.....	−10.7
Average Price	dollars	Jan.-Nov.	322,997	.....	35.2
Condominium	number	Jan.-Nov.	224	.....	−6.7
Average Price	dollars	Jan.-Nov.	175,850	.....	10.6

p = preliminary

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population in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
POPULATION					
STATE:					
Total De Facto Population	thous.	July 1, 1989	1,263.0p	.....	3.6
Total Resident Population	thous.	July 1, 1989	1,112.1p	.....	1.3
OAHU:					
Total De Facto Population	thous.	July 1, 1989	916.2p	.....	1.5
Total Resident Population	thous.	July 1, 1989	841.6p	.....	0.4
MAUI COUNTY:					
Total De Facto Population	thous.	July 1, 1989	139.6p	.....	11.7
Total Resident Population	thous.	July 1, 1989	97.2p	.....	4.5
HAWAII:					
Total De Facto Population	thous.	July 1, 1989	138.0p	.....	9.3
Total Resident Population	thous.	July 1, 1989	122.3p	.....	4.1
KAUAI:					
Total De Facto Population	thous.	July 1, 1989	69.3p	.....	6.8
Total Resident Population	thous.	July 1, 1989	51.0p	.....	3.4
CIVILIAN RESIDENT POPULATION:					
STATE	thous.	July 1, 1989	1,055.7p	.....	1.6
MILITARY PERSONNEL:					
STATE	number	July 1, 1989	56,370	.....	−12.0
Ashore	number	July 1, 1989	53,263	.....	−12.1
Afloat	number	July 1, 1989	3,107	.....	−9.5
CIVILIAN MILITARY DEPENDENTS	number	July 1, 1989	60,274	.....	−13.8
FOREIGN IMMIGRATION[1]	number	Jan.-Nov.	5,991	.....	23.4

p = preliminary.
[1]Includes only those entering Honolulu ports and does not include status changes.

income in hawaii

INCOME					
TOTAL PERSONAL INCOME**	mil. $	2nd Qtr.	22,025p	13.4	21.8
EMPLOYMENT INCOME[1]	mil. $	2nd Qtr.	16,849p	13.4	21.4
Manufacturing	mil. $	2nd Qtr.	676p	9.0	13.0
Construction & Mining	mil. $	2nd Qtr.	1,397p	11.8	38.7
Wholesale	mil. $	2nd Qtr.	660p	10.0	21.5
Retail	mil. $	2nd Qtr.	1,964p	11.1	19.9
Finance, Ins., & Real Estate	mil. $	2nd Qtr.	1,261p	24.6	26.5
Trans., Comm., & Util.	mil. $	2nd Qtr.	1,405p	8.9	23.7
Services	mil. $	2nd Qtr.	4,769p	22.7	28.3
Farm & Other	mil. $	2nd Qtr.	337p	−10.6	−2.6
Federal Civilian	mil. $	2nd Qtr.	1,120p	3.0	7.6
Federal Military	mil. $	2nd Qtr.	1,426p	2.0	5.2
State & Local	mil. $	2nd Qtr.	1,835p	17.0	22.7
PROPERTY INCOME (Dividends, Interest, & Rent)	mil. $	2nd Qtr.	3,388p	14.1	27.3
TRANSFER PAYMENTS ($2,867 minus personal contributions for social insurance $1,078)	mil. $	2nd Qtr.	1,789p	12.4	15.8
PER CAPITA PERSONAL INCOME:					
STATE	dollars	1989	18,472	.....	9.7
Oahu	dollars	1988	17,450	.....	7.0
Maui County	dollars	1988	15,279	.....	7.7
Hawaii	dollars	1988	13,331	.....	7.7
Kauai	dollars	1988	14,093	.....	9.6

***Total personal income and all components are seasonally adjusted at annual rates.*
[1]Includes wage and salary disbursements, proprietors' income, and other labor income.
p = preliminary.

HAWAIIAN BANK

Choosing and Calculating the Weights. Even when only trade flows are considered, trade-weighted exchange rate indexes can apply weights derived from exports, imports, or an average of the two. Because an economy may import goods and services mainly from one group of countries, and export mainly to another group, the choice can be critical. This choice depends mainly on the use of the index, because no single index is suitable for all purposes. For a large economy like the United States that trades with many different countries, the main purpose is to capture in a very broad-gauged sense the dollar's average foreign exchange value, and both exports and imports are usually employed for bilateral weights in a national index. If the purpose were to measure the inflationary impact of exchange rate changes on the domestic price level or competitive effects on import substitutes, an import-weighted index would be more appropriate. The objective here is to compute a relevant component for a composite series designed to lead state economic activity, and for this purpose the foreign currency price of our exports such as tourism services are more important than the cost of our imports from abroad. Export weights are therefore most suitable and are used here.

There is an added practical advantage of not including imports. Some products imported by Hawaii are priced only in U.S. dollars on world markets, so that there is no foreign exchange transaction involved at all. Crude petroleum is the best example. Most foreign crude oil imports come to Hawaii from Indonesia, which otherwise would not be included in even an import-weighted index. But in any case, fluctuations in the Indonesian rupiah have absolutely nothing to do with the volume of these oil imports.

The years over which the weights are calculated are also important. Many earlier exchange rate indexes applied fixed weights, but the currency composition of trade can change considerably over time. Moving weights are therefore more desirable. For First Hawaiian's index, a moving weight method is used, with heavier weights applied to more recent experience. (The most recent year is weighted .40, the previous year .30, the year before that .20, and the year before that .10—summing to 1.00. Applying heavier weights to recent experience makes the index more applicable to current circumstances, but the moving average prevents aberrations in any given single year from distorting the index.)

The weights for these ten currencies were then determined by considering both tourism and merchandise export

trade. Total visitor expenditures by currency were estimated from country visitor counts, applying rough estimates of spending propensities by nationality. Merchandise export trade values for the state, derived from U.S. Bureau of the Census data, were added to these visitor expenditures. The included currencies and their computed moving average export weights for the most recent year, in descending order, are:

Currency	Weight
Japanese yen	.747
Canadian dollar	.099
Australian dollar	.063
New Zealand dollar	.025
British pound	.018
German mark	.016
Korean won	.014
Taiwan dollar	.009
Singapore dollar	.006
Philippine peso	.003
Sum	1.000

The Japanese yen accounts for three-fourths of the index, and three currencies (the yen plus the Canadian and Australian dollars) for over 90 percent. While not surprising, this illustrates that our index is much more concentrated than most national exchange rate indexes, in which most single currencies constitute no greater than a 20 to 30 percent share.

It would indeed make a difference if an import-weighted index were computed instead. Based only on merchandise imports, the yen's share would still be important—40 percent of the same ten-currency basket today, having risen from 25 percent in 1980—but it would not dominate as much. Other important currencies in this same import-weighted index would be those of Singapore (20 percent, but again this is related spuriously to oil inflows), Taiwan (15 percent, a large part of which is electronic supplies), the Philippines (10 percent, also mainly electronics), and South Korea (7 percent, primarily miscellaneous manufactured items). Weights computed as an average of exports and imports would of course fall between the separate export and import weights, but the export side is much more heavily influenced by tourism than merchandise exports.

Currency Characteristics. Although the chosen index is based only on exports and includes only ten currencies, a broad sample of national monetary units are represented. Most of these are Pacific Rim currencies. Only two European currencies make the list, but these have the advantage of being major traded currencies and of proxying movements in other monetary units.

The currencies of Japan, Canada, Australia, New Zealand, the Philippines,

employment and jobs in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
EMPLOYMENT					
STATE:					
Civilian Labor Force	thous.	November	546.6p	1.1	2.9
Employment	thous.	November	531.8p	1.2	2.8
Unemployment	thous.	November	14.8p	−1.0	7.6
Unemployment Rate	percent	November	2.7p	−3.6	3.8
OAHU:					
Civilian Labor Force	thous.	November	401.0p	1.2	2.6
Employment	thous.	November	390.8p	1.3	2.5
Unemployment	thous.	November	10.2p	−0.5	6.8
Unemployment Rate	percent	November	2.5p	−3.8	4.2
MAUI COUNTY:					
Civilian Labor Force	thous.	November	57.2p	0.9	4.1
Employment	thous.	November	55.6p	1.0	3.7
Unemployment	thous.	November	1.7p	0.0	17.9
Unemployment Rate	percent	November	2.9p	−3.3	11.5
HAWAII:					
Civilian Labor Force	thous.	November	59.8p	0.0	4.5
Employment	thous.	November	57.8p	0.2	4.5
Unemployment	thous.	November	2.1p	−2.4	2.5
Unemployment Rate	percent	November	3.4p	−2.9	−2.9
KAUAI:					
Civilian Labor Force	thous.	November	28.7p	2.3	1.8
Employment	thous.	November	27.7p	2.4	1.5
Unemployment	thous.	November	1.0p	0.0	11.8
Unemployment Rate	percent	November	3.3p	−2.9	10.0
JOB COUNT BY INDUSTRY					
TOTAL JOBS—STATE	thous.	November	580.5p	1.3	3.0
Oahu	thous.	November	443.5p	1.4	2.7
Maui County	thous.	November	53.7p	0.8	3.9
Hawaii	thous.	November	55.2p	0.3	4.9
Kauai	thous.	November	28.1p	2.7	1.8
SUGAR (Mill and Field)	thous.	November	5.5p	−0.9	−2.7
PINEAPPLE (Cannery and Field)	thous.	November	3.1p	−4.7	−11.6
DIVERSIFIED MANUFACTURING (Excluding Sugar and Pineapple)	thous.	November	16.9p	0.0	−0.6
Durable Goods	thous.	November	4.1p	0.0	−1.2
Non-Durable Goods	thous.	November	12.8p	0.0	−0.4
Apparel and Textiles	thous.	November	2.2p	0.0	−12.2
DIVERSIFIED AGRICULTURE (Excluding Sugar And Pineapple, but Including Agricultural Self-employed)	thous.	November	8.6p	−5.0	6.2
CONTRACT CONSTRUCTION	thous.	November	29.9p	0.8	−5.5
TRANSPORTATION	thous.	November	32.5p	1.4	4.5
COMMUNICATION	thous.	November	7.4p	0.0	0.0
UTILITIES	thous.	November	2.8p	0.0	0.0
RETAIL TRADE	thous.	November	113.5p	1.0	0.2
WHOLESALE TRADE	thous.	November	22.6p	0.0	1.8
FINANCE, INSURANCE AND REAL ESTATE	thous.	November	36.3p	0.1	1.7
HOTEL SERVICES—STATE	thous.	November	39.5p	3.3	4.9
Oahu	thous.	November	19.9p	1.0	3.1
Maui County	thous.	November	9.0p	2.3	9.8
Hawaii	thous.	November	6.3p	4.2	4.2
Kauai	thous.	November	4.4p	14.3	3.5
OTHER SERVICES	thous.	November	113.4p	0.1	2.2
FEDERAL GOVERNMENT	thous.	November	33.7p	0.1	−1.2
Civilian Agencies	thous.	November	14.6p	0.7	4.7
Defense Department	thous.	November	19.1p	−0.3	−4.7
STATE GOVERNMENT	thous.	November	61.0p	6.7	8.5
COUNTY GOVERNMENT	thous.	November	14.4p	1.1	3.6
NON-AGRICULTURE SELF-EMPLOYED	thous.	November	39.6p	1.4	20.0

p = preliminary.

public assistance in hawaii

Series	Unit	Period	Number	Percent Change preceding period	Percent Change year ago
PUBLIC ASSISTANCE					
UNEMPLOYMENT INSURANCE:					
Insured Unemployment (Wkly Avg)	number	November	5,465	−0.7	25.6
Intrastate Initial Claims	number	Jan.-Nov.	49,815	.....	18.5
Interstate Initial Claims	number	Jan.-Nov.	2,836	.....	8.4
Unemployment Insur. Benefits	thous. $	Jan.-Nov.	46,807	.....	22.0
INCOME MAINTENANCE:					
Recipients[1]	no. persons	November	53,151	0.7	1.5
Payments	thous. $	Jan.-Nov.	119,136	.....	11.4
MEDICAL ASSISTANCE:					
Recipients[1]	no. patients	November	52,441	9.8	10.0
Payments	thous. $	Jan.-Nov.	211,319	.....	19.6
FOOD STAMPS:					
Recipients[1]	no. persons	October	79,913	0.9	−0.1
Payments	thous. $	Jan.-Oct.	68,498	.....	11.1
SERVICES:					
Recipients[1]	no. cases	3rd Qtr.	6,799	−3.2	−3.0
Payments	thous. $	3rd Qtr.	6,806	−19.8	6.7

[1]*Count of recipients is duplicated. A person may be counted in each*

banking and finance in hawaii

FINANCE					
COMMERCIAL BANK DEPOSITS:					
STATE:					
Total Deposits	mil. $	November	12,766.1	−0.1	13.3
Debits To Demand Deposits	mil. $	Jan.-Nov.	198,782.6	.....	27.3
OAHU:					
Total Deposits	mil. $	November	10,567.4	−0.2	13.5
Debits To Demand Deposits	mil. $	Jan.-Nov.	181,545.5	.....	28.3
MAUI:					
Total Deposits	mil. $	November	880.3	−0.6	9.9
Debits To Demand Deposits	mil. $	Jan.-Nov.	7,564.6	.....	15.9
HAWAII:					
Total Deposits	mil. $	November	902.2	0.6	15.3
Debits To Demand Deposits	mil. $	Jan.-Nov.	6,603.3	.....	25.2
KAUAI:					
Total Deposits	mil. $	November	416.2	−0.4	11.1
Debits To Demand Deposits	mil. $	Jan.-Nov.	3,069.2	.....	11.2
BANK LOANS OUTSTANDING—STATE:	mil. $	3rd Qtr.	9,061.5	5.4	18.0
Real Estate	mil. $	3rd Qtr.	4,325.9	4.4	20.7
Consumer	mil. $	3rd Qtr.	1,302.1	−0.8	4.1
Commerical & Industrial	mil. $	3rd Qtr.	2,737.5	8.0	22.2
Other	mil. $	3rd Qtr.	523.3	4.1	6.5
CONVENTIONAL HOME MORTGAGE RATES: HONOLULU	percent	November	10.06	4.4	0.6
TAX COLLECTIONS:[1]					
STATE	thous. $	Jan.-Nov.	2,374,483	.....	6.7
Oahu	thous. $	Jan.-Nov.	2,063,960	.....	7.0
Maui County	thous. $	Jan.-Nov.	133,402	.....	−1.4
Hawaii	thous. $	Jan.-Nov.	120,751	.....	0.5
Kauai	thous. $	Jan.-Nov.	56,366	.....	7.9

[1]*Taxes collected by the State Department of Taxation. Excludes property taxes which were formerly collected by the State but now collected by the Counties.*

the United Kingdom, and Germany are considered to float independently in the free market. Those of Korea, Taiwan, and Singapore are more closely managed by their national monetary authorities. Of the independently floating currencies, those of Japan, Germany, the United Kingdom and Canada are most readily traded in developed spot and forward markets.

The German mark is linked to other currencies in the European Monetary System, perhaps soon to be solidified into a more binding arrangement with the establishment of a pan-European central bank. The German currency is still the most dominant one in this union, so its inclusion also proxies movement of other currencies that are members of this monetary arrangement—those of France, Italy, the Netherlands, Belgium, Ireland, Denmark, and Spain, perhaps soon to be joined by others. Rising tourism to Hawaii from Europe in general could cause this aspect to be more important as time goes on.

In a weighted average index, a given currency can impact the entire series via either its weight or the magnitude of its changes. In the latter regard, relative volatility is important. Generally, the independently floating currencies show more volatility than the more heavily managed currencies. The Japanese yen, with the largest weight, is also one of the most volatile. The second most important Canadian dollar is much less variable against the U.S. currency.

The chart illustrates the volatility of the overall index, largely due to the yen. The index is not as unstable, however, as it would be if only the yen were included.

Importance of Exchange Rates for the Hawaii Economy. As the state economy becomes more exposed to foreign influences, exchange rate oscillations will be followed attentively. The huge swing in the Japanese yen that occurred in the late 1980s may not be repeated soon, but a reversal of that movement could be as devastating as the original shift was stimulative. Trade weights may also shift over time. A substantial decline in the yen's share is not likely, but gradual changes in the weights may occur. ■

ECONOMIC INDICATORS

A Bimonthly Report on Current Economic Conditions in Hawaii
by the Research Department, First Hawaiian Bank
P.O. Box 3200; Honolulu, Hawaii; 96847
January/February 1991

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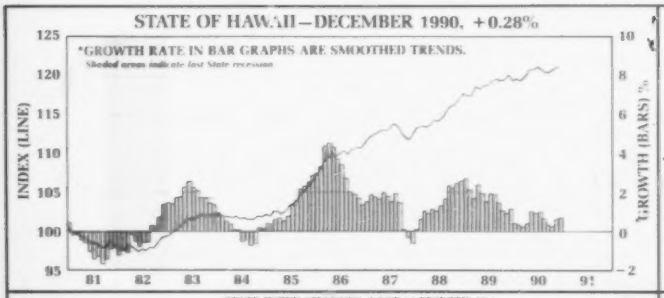
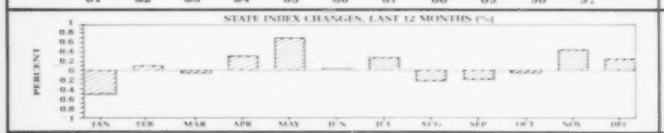

STATE OF HAWAII—DECEMBER 1990, +0.28%
*GROWTH RATE IN BAR GRAPHS ARE SMOOTHED TRENDS.
Shaded areas indicate last State recession
INDEX (LINE)
%GROWTH (BARS)
81 82 83 84 85 86 87 88 89 90 91

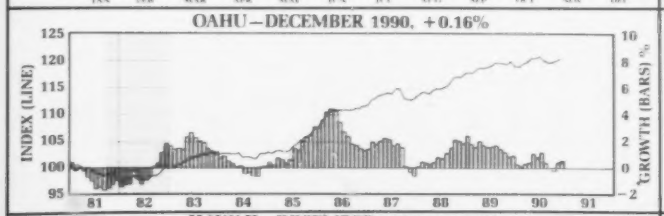
INDEX OF LEADING ECONOMIC INDICATORS

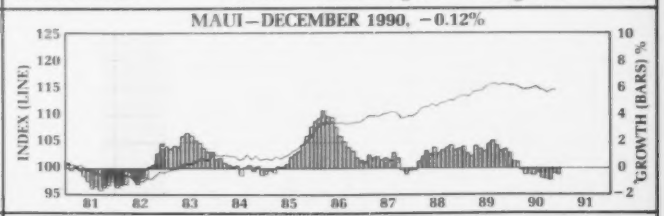
Starting with this issue, First Hawaiian Bank publishes a new series of leading economic indicators for the State and four Counties. The State index for December rose by 0.28 percent for the second consecutive month. The lead performer, also for the second consecutive month, was Hawaiian stocks. This index component has been bouncing back after recent declines related to the effects of weakness of the national economy. While the index broke the three-month (August to October) declining trend, the Research Department expects the index to be volatile in the near-term due to the effects of the Gulf war on tourism.

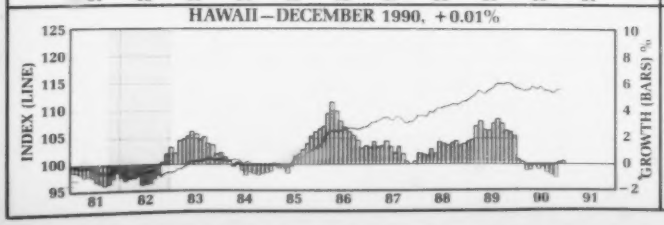


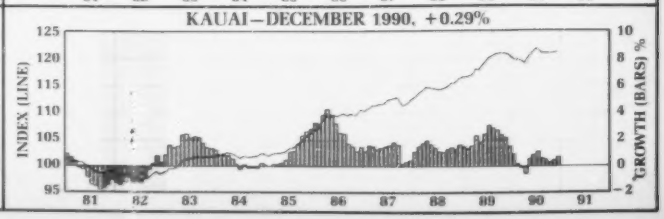
STATE INDEX COMPONENTS, DECEMBER 1990

Hawaii Stock Index	1.31%	National Leading Index	0.10%
Average Workweek Hour	1.17%	Expected Purchasing Power	–0.02%
Labor Market Conditions	0.91%	Construction Contracts	–0.50%
Monetary Policy	0.78%	Visitor Count	–0.54%
Credit Demand	0.62%	Trade-Weighted Exchange Rate	–1.05%









ECONOMIC INDICATORS
SPECIAL REPORT

A New First Hawaiian Bank Index of Leading Economic Indicators

Since mid-1987, First Hawaiian Bank has been publishing a series of leading economic indicators for the state and its four individual counties. The leading index was designed to predict changes in real gross state product, providing signals to government, business, and community leaders as to the turning points of the local economy, usually with a lead time of six to nine months. The Research Department will publish a new leading index series starting with this issue of the *Economic Indicators*. It incorporates several improved features and has better predictive power. The index has been modified to substitute five new components and to apply different weights to the 10 components used to reflect their relative impacts on the economy.

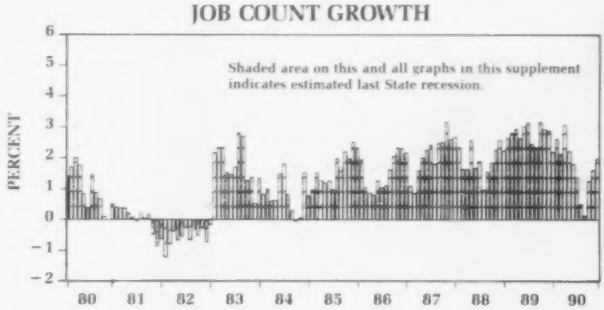
Description of the old series. First Hawaiian's former index consisted of three national components (the consumer price index, M-2 money supply, and the average prime rate) and seven local components (public contracts awarded, credit demand, average workweek hours, private construction permits, initial intrastate unemployment insurance claims, and an eight company Hawaii stock index). This index series included an overall State index and four county-specific indexes. Each of the 10 components bore equal weights.

The original leading index has been a reliable forecaster of economic activity. This index correctly reflected the 1982 recession, but there also have been occasional false signals. The new series takes into consideration Hawaii's international trade, inflationary expectations, and borrowing costs, as well as aggregate national economic activity. These added components, combined with the new weighting scheme, more accurately reflect and more appropriately balance the local, national, and international factors that impact the state economy.

New reference cycle. If the purpose of a leading index is to signal the turning points of the economy, such an index must be referenced to a statistical series that proxies *current* economic activity. The ultimate purpose may be to signal changes in real gross state product, but this measure is available only annually. A monthly measure of concurrent economic activity is needed for a test.

To compare the accuracy of the two indexes here, they are referenced to the monthly job count series, which is a good proxy for aggregate economic activity. An advantage of using the job count is that it is a real measure of the economy, not a money measure, so problems of adjusting the series to correct for inflation are avoided. The job count series used in the comparison is seasonally adjusted and smoothed by a ratio of the current month's job count to a 12-month lagged average, because it is quite volatile from month to month.

JOB COUNT GROWTH



The job count is an especially accurate measure of monthly economic activity because it takes into account the part-time employment prevalent in a service-based economy like Hawaii's. Depicted above, the job count declined from October 1981 to December 1982, serving to delineate the last state recession, and increased with the following economic boom. (The corresponding national recession extended from July 1981 to November 1982.) The new index demonstrates a much higher level of statistical significance than the old one in explaining this measure of concurrent economic activity.

DESCRIPTION OF THE NEW INDEX

The new set of indexes has five separate series—the State Index, and indexes for Honolulu, Maui, Hawaii, and Kauai Counties. These five contain six common components. The remaining four components are specific to the respective individual indexes. The six common components include three indicators from the national level (expected purchasing power, monetary policy, and the national leading index) and three state-level indicators (average workweek hours, the Hawaii stock index, and a weighted average exchange rate for Hawaii). The four specific State and County components are construction

RESEARCH DEPARTMENT
SPECIAL REPORT
JANUARY/FEBRUARY 1991

FIRST HAWAIIAN BANK
Established 1858 • Member of F.D.I.C.

contracts, credit demand, labor market conditions, and visitor count. Exceptions to these components for the various county indexes are: 1.) the Honolulu County Index has its own average workweek hour measurement and hence will share only five of the 10 components, and 2.) while the State Index uses the initial intrastate unemployment insurance claims (IUIC) as a proxy for labor market conditions, a similar measurement is not available at the county level and instead the number of unemployed workers is substituted for IUIC. (These exceptions also applied to the old set of indexes.)

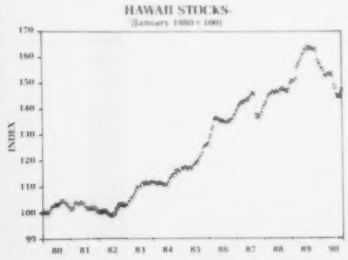
As mentioned, the components of the original Hawaii leading index were weighted equally, 10 percent each. In fact, each component varies in its importance for State economic activity. Unequal weighting can achieve greater predictive accuracy if some method of determining these weights can be applied. Using coefficients from linear regression techniques, the following relative weights were computed:

Common Component Group	
Hawaii Stock Index	12%
Average Workweek Hours	10%
National Leading Index	10%
Trade-Weighted Real Exchange Rate	10%
Expected Consumer Purchasing Power	8%
Monetary Policy	6%
Subtotal	56%
Specific Component Group	
Visitor Count	14%
Credit Demand	14%
Construction Contracts	10%
Labor Market Conditions	6%
Subtotal	44%
Total	100%

The purpose of changing the weights is to downplay the impact of those components that have a relatively small effect on future economic activity and increase the impact of the relatively important components such as the visitor count and credit demand. These weights may be subject to gradual change given the dynamic nature of the economy, but any such change will be done systematically based on quantitative techniques, not arbitrarily.

COMMON COMPONENT GROUP

Hawaii Stock Index. Of the six common components, Hawaii stocks bear the greatest weight. This index is composed of the average Wednesday stock market prices of eight Hawaii based companies: Alexander & Baldwin Inc., Bancorp Hawaii Inc., Barnwell Industries Inc., Castle & Cooke Inc., First Hawaiian Inc., Hawaiian Airlines Inc., Hawaiian Electric Industries Inc., and Maui Land & Pineapple Company Inc. If the stock market is efficient and the market price of stocks represents the present value of future earnings for the respective companies, then stock prices are excellent indicators of future economic activity.



As shown in the graph, Hawaii stock prices remained relatively flat during the 1982 recession, and growth picked up during the ensuing economic boom. The recent drop in the index is a reflection of current national economic conditions as well as concerns about Iraq's invasion of Kuwait.

Average Workweek Hours. This series represents the average weekly hours of a sample of production workers in six selected industries: contract construction, manufacturing, communications and utilities, trade, finance, and hotels. The data as used in the State Leading Index is adjusted to eliminate seasonal variations. However, as pictured in the graph, the index is still highly volatile because the average hours worked fluctuate greatly within a narrow band of hours.

In spite of this volatility, there are two relatively distinct levels of average weekly hours represented in the graph. The index through 1985 is lower than from 1986 to present. Hawaii's labor market became progressively tighter from 1987 onward, as the economic boom pushed the labor pool to capacity. As a leading indicator, average weekly hours should decrease as business confidence wanes and as the demand for the goods and services produced in Hawaii falls.

National Leading Index. The purpose of including this series is as a forward measure of overall economic activity at the national level. It is much more efficient to use the national composite index than entering any of its single components into the state index, as was done previously. Declines in the index clearly preceded Hawaii's last recession.

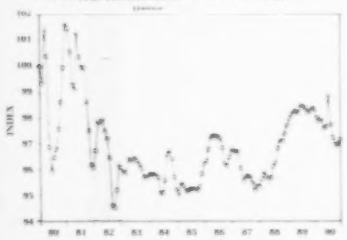
The current downward trend in the leading index is a reflection of the national recessionary environment. First Hawaiian Bank's forecast for 1991 now calls for a positive, if much lower, rate of state economic growth. While Hawaii is impacted by economic activity from both the U.S. mainland and Japan, a recent *Economic Indicators* article showed that cyclical swings from U.S. mainland sources tend to cause a relatively greater impact than similar swings from Japan. However, the U.S. and Japanese business cycles are not perfectly synchronized, and some economic forces originating in Japan that are not even closely related to the Japanese cycle can mitigate the U.S. cyclical influences.

Trade-Weighted Real Exchange Rate. This is a new component of the revised index. The trade-weighted exchange rate index is designed to capture the impact of changes in foreign purchasing power. For example, the dollar depreciated by two percent on a trade-weighted basis in December 1990, allowing foreigners to purchase Hawaii's goods and services more cheaply. This exchange rate swing can be summarized by the index without having to detail individual currencies.

The index includes 10 countries' currencies: Australia, Canada, Germany, Japan, Korea, New Zealand, the Philippines, Singapore, Taiwan, and the United Kingdom. The currencies were weighted on an export basis, which includes both visitor expenditures and merchandise exports. It was further adjusted for relative inflation between the respective countries and Hawaii. As expected, Japan's currency is weighted most.

Exchange rate movements are expected to impact Hawaii primarily through tourism expenditures. However, all currency swings affect expenditures with a lag, hence the index is an excellent indicator of future economic activity. (See the related article in this issue for details on First Hawaiian's trade-weighted exchange rate index.)

Expected Consumer Purchasing Power. Any comprehensive leading index requires some measure of inflation, both because price level increases reduce real incomes and because higher inflation is usually more volatile—inducing greater uncertainty in the planning process. The old series used the national consumer price index. This is a less than ideal component because it measures only past inflation performance—with a substantial lag. (The U.S. Bureau of Labor Statistics computes a Consumer Price Index for Honolulu, but this is available only twice yearly which entirely precludes its use in a monthly index.)

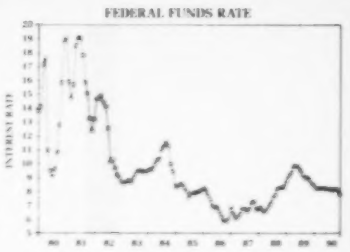


The new series uses the interest rate spread between 3-month and 30-year government securities to proxy expected future price level changes. The greatest cause for a divergence between short- and long-term interest rates is expected inflation. Interest rates on long-term financial instruments must incorporate an inflation premium to compensate the investor for inflation over the life of the instrument.

Even though expectations about future inflation may be closely related to recent experience, they are not the same. Choosing this proxy eliminates the lag involved with using actual past inflation numbers, and is even forward-looking because an efficient financial market reflects expected, not past, inflation.

As shown in the chart, the steep rises in the index prior to 1982 demonstrates the historical tendency of short-term interest rates to exceed long-term rates just prior to recessions. This has frequently been due to credit markets that are too tight. This aspect is another characteristic that makes the series a good leading indicator. The more moderate fluctuations from 1983 to 1988 are attributable to more stable inflation expectations, which also corresponded to the 1980s economic boom.

Monetary Policy. There is an inverse relationship between lending rates and economic activity. Higher interest rates discourage borrowing and put a brake on the economy.



Lower interest rates encourage borrowing, investment, and economic growth. While the total effects of interest rate swings take time to filter through the economy, the impact on borrowing activity is relatively quick.

The old series included the commercial bank prime rate, which was appropriate as a measure of the cost of bank credit. However, the prime rate is an administered rate that changes relatively infrequently. A more continuously changing market interest rate gives better ongoing signals.

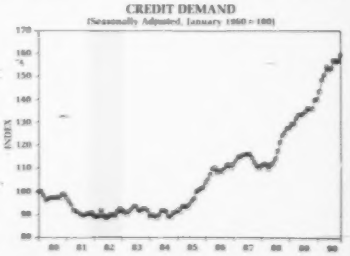
The new series uses the federal funds rate, the rate on very short-term interbank loans, as a measure of monetary policy. The federal funds rate, pictured in the graph, is the market rate influenced directly by Federal Reserve open market operations. A lower federal funds rate indicates expansionary monetary policy, and a higher federal funds rate suggests tighter policy. Trends in that rate usually later influence the prime lending rate, which then sets the interest rates charged for many other types of loans offered by commercial banks. An entire array of other short-term market interest rates also generally moves in tandem with the federal funds rate.

SPECIFIC COMPONENT GROUP

Visitor Count. This important series is included as an overall gauge of tourism activity, and is adjusted to smooth seasonal variations in travel to Hawaii. A monthly indicator of advance bookings would be a better component, but such an indicator is not available as a complete time series. The state visitor count is widely published and analyzed. For the county-level indexes, the respective county visitor counts are used.

The index in the chart suggests a moderation of the growth patterns prior to the 1982 recession, with a steeper upswing since then. The large drop during 1985 was related to the United Airlines pilot strike.

Credit Demand. This series, along with the visitor count, bears the greatest weight. Credit demand is used to proxy overall business and consumer confidence in the economy. It is a very broad-gauged measure because credit is extended across all sectors of the economy. The series is adjusted for inflation, and is also seasonally adjusted.



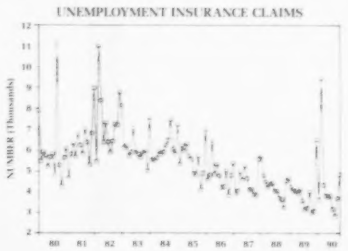
As shown in the graph, this indicator experienced a steep decline prior to the 1982 recession, and remained relatively flat through 1984. It then shows a steep climb coinciding with the construction boom and an expanding state economy.

Construction Contracts. This series is also new to the Hawaii Leading Index, combining both public and private sector construction. In the old index, these two sectors were separated. Dollar values are adjusted for inflation and seasonal variations.

By the very nature of the construction industry, this indicator is highly volatile. However, the index suggests some leveling off prior to the 1982 recession and an upward trend from the mid-1980s. It took 10 years for the industry to break the $2-billion mark in total activity in 1987, but only two years for the industry to reach another milestone of $3 billion in 1989.

This index is constructed from private building permits and public construction contracts, which foreshadow actual construction; a built-in lead-time therefore exists. Given the wide range of projects involved, however, from simple improvements to large resort and public projects such as the H-3 Freeway and airport expansions, the time it takes for the total impact of construction to filter through the economy varies widely.

Labor Market Conditions. This component uses initial intrastate unemployment insurance claims (IUIC). Along with the average workweek series in the common component group, it proxies the tone of the labor market. While IUIC may be viewed as a current indicator and not a leading indicator since it reflects the current labor market conditions, it is a useful indicator of expected future labor demand. As mentioned previously, the number of unemployed persons is substituted for the county indexes. This indicator is also seasonally adjusted.



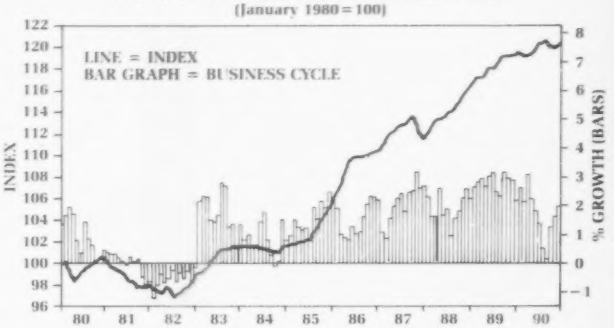
The relationship between IUIC and the economy is inverse; a higher IUIC suggests more impending slack in the labor market, and a lower IUIC indicates a tightening of the labor market. The three spikes depicted in the graph correspond to national recessions and the March 1990 state hotel workers strike, respectively. This indicator also shows a downward trend (i.e. increased tightness) during the latter half of the 1980s as a reflection of the booming Hawaiian economy.

In spite of being designed to proxy the demand for labor, this indicator may give another kind of signal given the State's current low unemployment rate. Many businesses are faced with a shortage of workers, hindering their economic growth. This ambiguity is likely reflected in the low estimated weight for this component.

EVALUATION OF THE HAWAII LEADING INDEX.

Movements of the new index reflects the growth patterns of the State. Statistically, it is much more significant in overall explanatory power with regard to future economic activity, and it signals changes in direction of the economy well. Overall, the index seems to lead the reference cycle by 5 to 10 months.

STATE INDEX and the BUSINESS CYCLE
(January 1980 = 100)



The traditional rule-of-thumb for leading indexes is that a three-consecutive month decline predicts oncoming recession. The index reached a peak in December 1980, then declined by four consecutive months starting in April 1981. The job count declined from October 1981 to December 1982 and annual real gross state product fell in 1982; clearly this was a state recession period. Since then, the index has given only one false signal, starting September 1987. The index at that time was impacted by the effects of the national stock market crash. The index is not immune to economic shocks, and in this case it was sensitive to such a shock that could have led to worsening State economic conditions.

More recently, the index registered three consecutive declines from August to October 1990, suggesting possible negative growth for Hawaii's economy in the coming year. First Hawaiian's original forecast for 1991 was positive, but it was a sharp drop from a revised 7.4-percent growth rate for 1989 and an unexpectedly large 5.9-percent growth estimate for 1990. The index is sensitive to such drops in the economic growth rate. It recovered for November and December as Hawaii stocks increased and the effects of inflation from higher oil prices stabilized. Yet the combined effects of the national recession and the unfolding Mideast war will undoubtedly take its toll on Hawaii's tourism. It is just such times as these that leading indexes are watched most closely, and the numbers in the coming months will get close attention.

RESEARCH DEPARTMENT
SPECIAL REPORT
JANUARY/FEBRUARY 1991

FIRST HAWAIIAN BANK
Member FDIC
Established 1858

ECONOMIC INDICATORS

Research Department
First Hawaiian Bank
March/April 1991

War, Recession, and Tourism

The year 1991 began on a sour note for Hawaii's economy. Tourism was hit by massive cancellations from all major markets. Travelers' behavior also took Hawaii's economic forecasters by surprise. Why was it not foreseen?

The problem was not in failure to predict mainland recession. The U.S. recession that began in 1990 was among the most anticipated in this century. Its beginning was related to the August Kuwait invasion, but its start may actually predate that. Regional "rolling recessions" had been evident throughout the previous half-decade. Debt-burdened consumers had been winding down for months. This recession actually came after several false alarms during the eight year expansion, a growth span that nearly broke the postwar record.

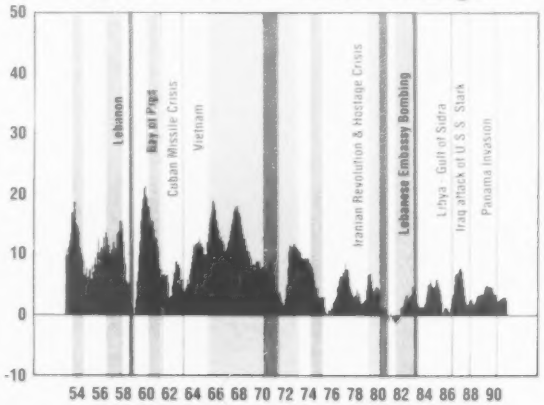
The problem also did not lie in failure to foresee the war. The inexorable military build-up in the Gulf made this one of the most predictable wars in memory, too. When the air war finally began in mid-January, the financial markets greeted it with a surge of relief.

It was the two developments taken together, combined with the psychological reaction to possible terrorism, the hassle of increased airport security, and official pronouncements in the Japanese Diet that travel might be inappropriate at the time, that were blamed for dealing the fatal blows to early 1991 travel to Hawaii. The extent of this reaction, if not the confluence of circumstances which accompanied it, was a first.

In the chart, gray-shaded U.S. recession periods do correspond generally to lower growth in Hawaii's total visitor count. Lower visitor growth occurred during every recession (although it sometimes began before or extended after the official recession period), except in the 1970 and 1981-82 episodes. Weak westbound visitor growth projected for 1991 before the war shock did reflect anticipated recession. Eastbound traffic was not expected to be nearly as weak because of strong previous growth, the relatively healthy Japanese economy, and less correspondence in any case between the Japanese business cycle and their visitors to Hawaii.

> A "growth recession" for Hawaii in 1991 is much more likely than an actual recession. We continue to forecast that growth recession.

Visitor Count Percent Changes[1]



[1]Computed from seasonally adjusted, 13-month moving average levels.

The impact of war on tourism is more ambiguous. Wars have not always been accompanied by terrorism fears, and historically wartime spending has been positive for the general economy. Only selected incidents can be depicted (in red) on the chart—and correspondence does not necessarily imply causation—but brief visitor declines did follow or coincide with some of them. The Vietnam war saw both ups and downs of visitor growth, but certainly it was not all bad for the Hawaii economy because of the state's location in that military escalation and its R&R use.

The Iraqi war's rapid end caused speculation that the national recession might end more quickly too, but war-end euphoria will not be enough. If terrorism phobia also evaporates, some tourism resurgence is likely. Visitor numbers may not climb back to where they might otherwise have been, and some cancellations are lost forever, but a state recession for the year remains avoidable. Previous tourism shocks, almost as severe, have been survived without recession.

Much recent attention has been devoted to prospects for a 1991 state recession. Much less attention was given the pre-war forecast of **slower** growth for 1991 than in any previous year since 1982, the year of our last recession. Whether growth is positive or negative is all that seems to matter in the discussion, not the actual rate of growth. A "growth recession" for Hawaii in 1991, in which actual growth remains positive but signs of slack in resource use appear, is much more likely than an actual recession. After years of spectacular growth, even a slower positive growth rate will be quite noticeable. We continue to forecast that growth recession over at least part of the year.

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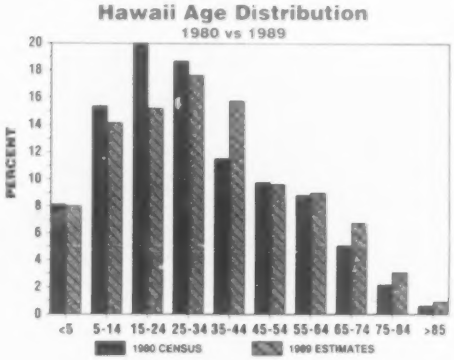
Demographic Change and Hawaii's Growth Prospects

One of the more important factors that will impact the vitality of the future Hawaiian economy is shifting age distributions in the United States, Japan, and Hawaii. Economic forecasting is always filled with uncertainty; no forecaster can take into account all possible political scenarios or predict supply-side shocks. However, forecasts based on the outcomes of demographic changes are less filled with risk because conclusions are made about people already living.

The effects of a maturing population on economic growth have attracted attention in several countries. Generally, not only are people living longer, but marriages are occurring later, and fertility rates are falling. An acute concern is in Japan, where the percentage of unmarried women ages 20 to 24 rose from 55 percent in 1950 to 78 percent in 1980, and the fertility rate was at a postwar low of 1.57 children per woman in 1989. For those countries experiencing a rapidly aging population, there is anxiety about the burden an increasing elderly population will place on the economy, and in particular on the smaller work force. There also is worry that economies with an older population will lose vitality as overall consumption decreases.

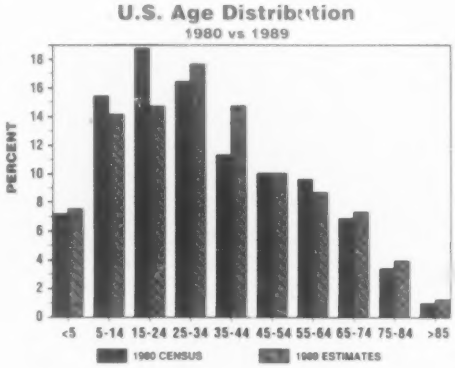
In the U.S., a benefit of a maturing society is the possible increase in the national savings rate, which will assist in reducing the federal deficit and lessen the U.S. need for foreign capital. As the baby boom generation matures, its members should save relatively more income as they plan for retirement. This reduced consumption, however, may lead to a lower economic growth since consumption makes up approximately two-thirds of total national output.

Overall trends. The age distributions of Hawaii, the U.S., and Japan are shown in the graphs. They illustrate the distribution shift between 1980 and 1989, the most recent estimates. The trend for Hawaii and the U.S. is similar; the once dominant age cohort of 15 to 24 years has given way to the 25 to 34 age cohort. There are implications for changes of consumption patterns. This shift also implies that there will be relatively fewer people to fill entry-level jobs, but the average skill level of the work force will probably increase.



Japan had a more mature age distribution than the U.S. in 1980. The 25 to 34 age cohort was dominant then, but the 35 to 44 age cohort was dominant in 1989. This difference between the U.S. and Japan age distributions is partly due to Japan's fertility rate decline and the longevity of its people. Hence, Japan is aging rapidly. In 1989, the proportions of the population in the U.S. and Japan over 65 were both 12 percent. However, by 2020, the U.S. and Japan shares will rise to 17 and 24 percent, respectively.

Impact on Hawaii. Changes in the age distributions of the U.S., Japan, and Hawaii populations should impact the island economy on several fronts. Graying U.S. mainland and Japanese populations will affect tourism. An older Hawaii population will change the structure of its labor force, its productivity, and the consumption patterns of its residents.



Tourism. The aging U.S. and Japan populations will have mixed effects on tourism into the decade. The U.S. population is moving towards and the Japanese population is moving away from the age groups that have the greater propensities to travel to Hawaii. The U.S. age cohort traveling most to Hawaii is the 40 to 49 age group; the second most important is the 30 to 39 age group. In Japan, the 25 to 29 age group travels abroad most, with the 20 to 24 age group second.

Westbound visitor expenditures probably will never match levels spent by the Japanese visitors. However, the relative importance of the westbound visitor market is likely to increase while the relative importance of the eastbound visitor market may decrease. According to a U.S. Bureau of Labor Statistics Consumer Expenditure Survey, the two highest income cohorts for 1989 were the 35 to 44 and 45 to 54 age groups.

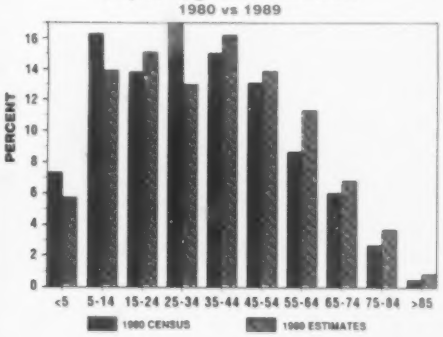
As shown in the last graph, the difference in incomes for these two age groups was approximately $1,000 per year, with the 45 to 54 age group being the higher. However, the 25 to 34 age group was over $10,000 per year below the 35 to 44 age group, and the 55 to 64 age group was over $7,000 per year lower than the 45 to 54 age group.

The distinction of the two middle cohorts becomes even greater after analyzing the composition of their members. The average number of persons per consumer unit peaks with

the 35 to 44 age cohort; while not all consumer units are families, this peak partly reflects children becoming independent from their parents. Also, the average number of workers in each consumer unit peaks with the 45 to 54 age cohort, partly due to mothers returning to the work force. Hence, while family responsibilities diminish as consumer units begin to have less non-working dependents, wage earners per consumer unit increase. Tourism can be marketed to the age cohort that has more income per consumer unit member.

Work force. Hawaii's dominant 15 to 24 age cohort in 1980 was estimated to rank third in 1989. The 25 to 34 and 35 to 44 age cohorts were estimated to rank first and second, respectively. This shift will have mixed results on Hawaii employment.

Japan Age Distribution
1980 vs 1989



The islands can expect to have a higher quality of workers for the next 10 to 20 years. Here it is assumed that the state follows the national trend in which these two age cohorts experience higher labor force participation rates and lower unemployment rates. While there may be some inflexibility in occupations, there also will likely be a greater degree of stability in the work force because many in those two cohorts have family obligations. As an added benefit, Hawaii was ranked fifth in the nation in the number of college graduates as a percent of the population aged 25 and over in 1980, so this stable work force will also be relatively well educated.

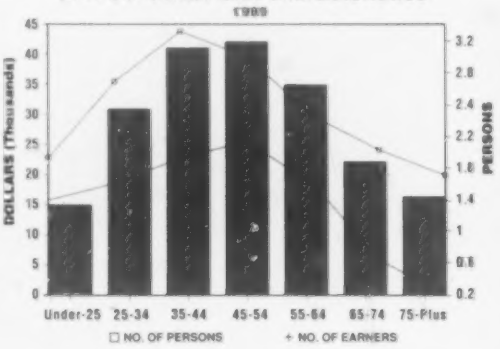
On the other hand, Hawaii will continue to have a tight labor market at the entry level, where many job openings occur. Usually members of the 15 to 24 age cohort fill those positions since it is at this age that most people enter the labor force. While this age cohort was dominant in 1980, Hawaii began having a severe labor shortage starting from about 1987. Employers found it progressively more difficult to fill entry level positions. In the visitor industry on the neighbor islands, some employees switch employers after being on the job for a few months. The plus side of this demographic adjustment is that more job opportunities have been created for the elderly residents who would normally not be in the labor force.

The U.S. population is moving towards and the Japanese population is moving away from the age groups that have the greater propensities to travel to Hawaii.

Marketplace. Usually, a maturing population will consume fewer goods and services as they prepare for retirement. However, the impact on Hawaii's economy will differ from the national trend for some consumer purchases. Nationally, homeownership starts for many between ages 25 and 34. For Hawaii, however, there are two peaks of ownership, the 25 to 34 age cohort for lease homes and the 35 to 44 age cohort for fee simple homes. Based on the current age distribution, the demand for homes should increase over the next 10 years before it subsides. Some of the softness in the current real estate market is probably due to discouraged home buyers temporarily dropping out. This bodes well for the many consumer purchases that would go along with purchasing a home, such as appliances.

Purchases of other large ticket items, such as automobiles, are often analyzed in light of demographics. Yet unlike the U.S. mainland, Hawaii's manufacturing sector in high priced durable items is negligible. Changes in consumer purchasing patterns here mainly impact the retail level where it is relatively easier to change product mix in order to suit changing consumer habits and tastes. The impact on manufacturing production can be ignored.

U.S. Consumer Unit Characteristics
1989



Conclusion. Future demographic trends are optimistic for Hawaii. Tourism is now highly dependent on the young Japanese market. While their society is getting older, propensity to travel abroad may not decline as much, if marketing strategies can target the older Japanese market to encourage travel. It is also somewhat reassuring that the distribution of the U.S. population is moving towards age groups that travel most to Hawaii. Hence increased mainland marketing efforts geared to an already large visitor market will assure the industry of continued solid performance.

On the home front, shifts in the resident age distribution should have an overall favorable impact. While the islands are expected to continue to confront a tight labor market, a generally older labor force will assure better performance and higher productivity. Sectoral effects are also more favorable compared to some mainland regions, which must deal with changes in consumer tastes affecting their manufacturing sector.

Hawaii Population & Income

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Population			
State residents (thous., Apr. 1, 1990)	1,108.2	.....	.....
de facto	1,248.4	.....	.....
Oahu residents (thous., Apr. 1, 1990)	836.2	.....	.....
de facto	908.0	.....	.....
Maui residents (thous., Apr. 1, 1990)	100.5	.....	.....
de facto	137.3	.....	.....
Hawaii residents (thous., Apr. 1, 1990)	120.3	.....	.....
de facto	135.1	.....	.....
Kauai residents (thous., Apr. 1, 1990)	51.2	.....	.....
de facto	68.0	.....	.....
Military personnel (thous., July 1989)	56.4	.....	–12.0
Civilian dependents	60.3	.....	–13.8
Foreign Immigration (no., yr. to Dec.)	6,412	.....	19.1
Total Personal Income ($ mil., 3rd Qtr. 1990)	22,550	6.8*	8.3
Employment Income	17,294	6.6*	8.8
Manufacturing	697	20.0*	5.0
Construction & Mining	1,487	–1.1*	8.1
Wholesale	693	4.8*	10.0
Retail	2,025	2.8*	7.6
Finance, Ins., & Real Estate	1,301	15.9*	16.5
Trans., Comm., & Utilities	1,439	7.3*	6.8
Services	4,938	12.2*	12.1
Farm & Other	337	–1.2*	7.3
Federal Civilian	1,143	8.1*	4.8
Federal Military	1,444	5.4*	4.3
State & Local	1,791	–6.0*	6.2
Property Income	3,475	10.7*	6.1
Transfer Payments: net of personal contributions for social insurance	1,781	1.8*	7.0
Per Capita Personal Income ($, 1989)	18,472	.....	9.7

*Annual Rate

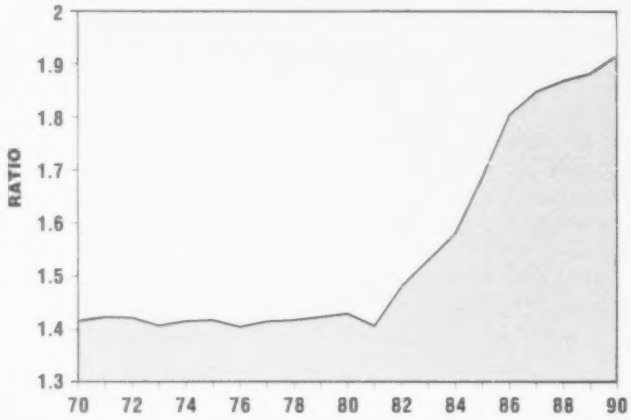
International Indicators

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Hawaii Real Trade-Weighted Exchange Rate Index (1980 = 100, Feb.)	114.97	1.1	5.7
Japan			
Real GNP (yen bil., 3rd qtr.)	443,341	4.1*	5.4
Yen/$ exchange rate (Jan.)	133.88	0.2	–10.2
Current Balance ($ bil., 3rd qtr.)	7.5	–0.4**	–7.5**
Discount rate (%, end Feb.)	6.0	0.0**	1.8**
Long-term prime rate (%, Apr. 1, 1991)	7.7	0.2**	0.2**
Nikkei Stock Index (avg. Feb.)	25,219	8.1	–30.9
Real GNP/GDP, Other Hawaii Trade Partners (1985 Prices)			
Canada (GDP, bil. C$, 3Q: 1990)	557.38	–1.0*	0.6
Australia (GDP, bil. A$, 3Q: 1990)	302.36	1.8*	–0.6
New Zealand (GDP, mil. NZ$, 1989)	45,846	.....	1.1
Korea (GDP, bil. won, 1989)	120,429	.....	6.1
Taiwan (GNP, bil. NT$, 3Q: 1990)	978.6	10.7*	3.2
Singapore (GDP, mil. SGD, 1989)	52,679	.....	9.2
Philippines (GNP, bil. pesos, 1990)	749.28	.....	3.1
United Kingdom (GDP, bil. £, 2Q: 1990)	422.52	4.0*	2.6
Germany (GNP, bil. DM, 3Q: 1990)	2,168.7	6.8*	5.5

*Annual Rate **Incremental change

Domestic Nonfinancial Debt

Relative to GNP



The debt explosion of the 1980s is one reason to expect only modest recovery from the 1990-91 recession. It may also yield a legacy of slower growth for the 1990s in general, as debt-burdened consumers retrench and highly leveraged corporations invest less.

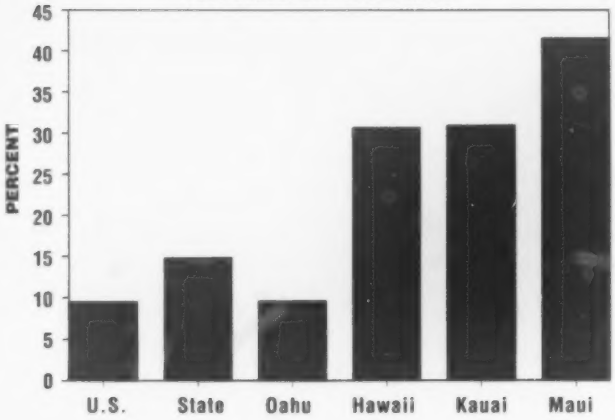
U.S. Economic Indicators

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Gross National Product ($ bil., 4th Qtr.)	5,521.3r	0.5*	4.4
In 1982 dollars	4,149.5r	–2.0*	0.4
Personal Income (January)	4,719.1p	–1.8*	4.1
Real Per Capita Disposable Income (1982 dollars, 4th qtr.)	11,370r	–1.2	–1.5
Productivity Index Nonfarm business sector (1982 = 100, 4th Qtr.)	110.9p	0.0	–0.1
Civilian Employment (thous., Jan.)	116,922	–0.6	–0.9
Unemployment rate (%, January)	6.1	0.1**	0.9**
Capacity Utilization (%, January)	79.9p	–0.5**	–2.8**
Consumer Confidence Index (1985 = 100, February)	57.7	4.7	–45.9
Price Indexes			
CPI-U (1982-84 = 100, Feb.)	134.8	2.4*	5.3
PPI-Finished Goods (82 = 100, Feb.)	121.1	–8.5*	3.2
Prime Interest Rate (%, February)	9.05	–0.5**	–1.0**
Federal funds rate (%, February)	6.25	–0.7**	–2.0**
3-Month Treasury bill (%, February)	5.94	–0.3**	–1.8**
30-Year Treasury bond (%, February)	8.03	–0.2**	–0.5**
Money Supply (M2, $ bil., seas. adj., February)	3,356.2p	8.7*	3.1
Domestic Nonfinancial Debt ($ bil., December)	10,472.1	0.6	0.0
Corporate Profits—After Tax ($ bil., 3rd qtr.)	179.4	8.0	9.7
Common Stock (DJIA, avg. February)	2,863.04	10.6	9.5
Current Balance ($ bil., 3rd qtr.)	–25.6p	–3.1**	1.1**
Trade Balance ($ bil., January)	–7p	–0.7**	3.2**

*r = revised p = preliminary *Annual rate **Incremental change*

Population Growth Rates

1990 Census over 1980 Census



The 1990 Census figures indicate that Hawaii's population grew at a faster rate than the nation's. This growth is attributable entirely to the neighbor islands. While Oahu grew at the same rate as the nation, Hawaii and Kauai grew at three times the rate and Maui grew at four times the rate.

Hawaii Banking & Finance

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Commercial Bank Deposits ($ bil., 12-month ending February)			
State Total Deposits	149.8	.....	14.9
Debits to demand deposits	225.3	.....	27.0
Oahu Total Deposits	125.7	.....	16.9
Debits to demand deposits	206.3	.....	27.9
Maui Total Deposits	10.6	.....	12.0
Debits to demand deposits	8.3	.....	21.1
Hawaii Total Deposits	10.6	.....	16.7
Debits to demand deposits	7.2	.....	19.0
Kauai Total Deposits	4.9	.....	13.0
Debits to demand deposits	3.4	.....	10.2
Bank Loans Outstanding ($ mil., 4th Qtr.)			
State	9,291.5	2.3	14.1
Real Estate	4,473.4	3.4	19.8
Consumer	1,308.6	0.5	0.9
Commercial & Industrial	2,827.0	3.3	16.8
Other	581.3	11.1	14.2
Conventional Home Mortgage Rate			
Honolulu (%, January)	9.5	0.3**	–0.2**
State Tax Collections ($ mil., Jan.)	325.3	45.7	31.9

**Incremental change

Hawaii Employment & Jobs

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Civilian Employment (thous., January)			
State Labor Force	545.4p	0.2	4.0
Employment	530.0p	–0.3	4.1
Unemployment rate (%)	2.8p	0.5**	–0.1**
Oahu Labor Force	394.3p	0.0	2.2
Employment	384.5p	–0.3	2.4
Unemployment rate (%)	2.5p	0.4**	–0.2**
Maui Labor Force	58.0p	–0.1	7.9
Employment	56.3p	–0.5	7.8
Unemployment rate (%)	3.0p	0.4**	0.1**
Hawaii Labor Force	63.6p	1.0	11.2
Employment	61.0p	–0.1	10.6
Unemployment rate (%)	4.0p	1.0**	0.5**
Kauai Labor Force	29.5p	1.2	7.3
Employment	28.4p	0.2	7.2
Unemployment rate (%)	3.9p	1.0**	0.1**
Job Count by Industry (thous., January)			
Total Jobs—State	583.5p	–1.1	4.3
Oahu	441.0p	–1.2	2.9
Maui County	55.0p	–1.0	8.2
Hawaii	58.7p	–0.7	11.0
Kauai	28.9p	–0.9	7.2
Sugar (mill & field)	5.5p	0.9	–1.8
Pineapple (cannery & field)	2.9p	0.0	0.0
Diversified Agriculture	8.2p	–1.8	12.3
Diversified Manufacturing	16.7p	0.0	–0.3
Durable goods	4.3p	0.0	3.7
Non-durable goods	12.4p	0.0	–1.6
Apparel & textiles	2.1p	–2.4	–14.6
Contract Construction	32.7p	–1.4	8.3
Transportation	32.5p	–0.5	4.5
Communication	7.3p	0.0	–0.7
Utilities	3.1p	0.0	8.9
Retail Trade	113.1p	–2.5	1.1
Wholesale Trade	22.6p	–0.2	1.3
Finance, Insurance, & Real Estate	37.2p	–0.7	5.1
Hotel Services—State	40.8p	–0.5	7.2
Oahu	20.0p	–0.3	2.3
Maui County	9.2p	–1.6	8.9
Hawaii	7.1p	–0.7	15.6
Kauai	4.7p	1.1	17.7
Other Services	116.9p	0.1	6.0
Federal Government	32.5p	–0.8	–3.0
Civilian Agencies	13.8p	–1.4	0.4
Defense Department	18.7p	–0.5	–5.3
State Government	59.6p	–4.3	11.5
County Government	14.3p	–1.0	3.3
Non-Agriculture Self-Employed	37.8p	1.9	3.1

**Incremental change

Dr. Leroy O. Laney, Vice President and Chief Economist
William S. Akamine, Jr., Research Officer
Russell W.K. Pang, Research Assistant
Linda L. Uchida, Librarian

Economic Indicators is a bimonthly newsletter of the Research Department of First Hawaiian Bank, published since 1961.
Replication or quotation of materials is permitted with appropriate source citation. While efforts have been made to insure accuracy, statistical reliability depends on original sources.

Hawaii Business Activity

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
State Gross Business Receipts			
($ mil., year to January)	4,139.8	.....	–0.9
Diversified Manufacturing	46.2	.....	–39.8
Diversified Agriculture	29.9	.....	–23.0
Retailing	1,452.0	.....	0.4
Wholesaling	1,066.6	.....	–5.8
Services	924.2	.....	–0.7
Construction	405.9	.....	26.4
Other	214.9	.....	–7.0
Retail Car Sales—State			
(Number, year to January)	3,827	.....	35.6
Oahu	2,859	.....	42.1
Maui	359	.....	13.2
Hawaii	443	.....	38.4
Kauai	166	.....	–4.0
Honolulu CPI (1982-84 = 100, 2nd half 1990)			
Urban Wage Earners & Clerical Workers	141.6	7.9*	7.3
All Urban Consumers	140.8	8.0*	7.4
Tourism (Number, January)			
Overnight or Longer Visitors	537,040p	–6.2	–7.6
year to date	537,040p	.....	–7.6
Westbound Visitor Count	344,300p	–1.9	–10.9
year to date	344,300p	.....	–10.9
Oahu	225,680p	0.1	–8.6
year to date	225,680p	.....	–8.6
Maui County	135,430p	–5.0	–14.2
year to date	135,430p	.....	–14.2
Hawaii	80,220p	12.6	–9.6
year to date	80,220p	.....	–9.6
Kauai	73,170p	1.6	–10.2
year to date	73,170p	.....	–10.2
Average Daily Census	131,640p	5.9	–4.7
Average Length of Stay (days)	11.9p	8.2	7.2
Eastbound Visitor Count	192,740p	–13.0	–0.9
year to date	192,740p	.....	–0.9
Oahu	185,530p	–13.7	–1.9
year to date	185,530p	.....	–1.9
Maui County	36,070p	–2.5	16.2
year to date	36,070p	.....	16.2
Hawaii	20,050p	10.2	27.8
year to date	20,050p	.....	27.8
Kauai	17,490p	17.8	13.8
year to date	17,490p	.....	13.8
Average Daily Census	39,790p	–13.6	9.3
Average Length of Stay (days)	6.4p	12.3	10.3
Hotel Occupancy Rate—State			
(%, February)	67.5	–3.7**	–21.0**
year to date	69.3	.....	–15.1**
Oahu	73.0	–7.8**	–21.4**
year to date	77.1	.....	–15.2**
Maui Island	58.8	3.0**	–22.9**
year to date	57.1	.....	–17.1**
Hawaii	61.2	4.1**	–17.2**
year to date	59.1	.....	–15.3**
Kauai	56.0	8.5**	–19.3**
year to date	51.6	.....	–15.3**

*p = preliminary *Annual rate **Incremental change*

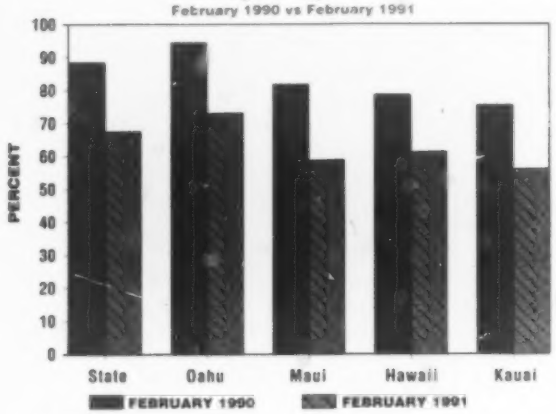
Hawaii Business Activity *(Cont.)*

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Defense Appropriations			
Total Funds ($ mil., year to 3rd qtr.)	1,553p	.....	–0.6
Military payroll	738p	.....	1.8
Civilian payroll	488p	.....	–5.2
Local purchases	327p	.....	1.3
Agriculture (January)			
Sugar Production (thous. tons)	9.3	.....	4.5
Price per ton	437.80	.....	–5.2
Pineapple Production (thous. tons)	18,366	.....	–5.1
Honolulu Construction Cost Indexes (Feb.)			
Single Family (1982 = 100)	151.1	.....	7.5
High Rise (1982 = 100)	148.7	.....	9.7
Private Permits ($ thous., year to Jan.)			
State Residential	91,822	.....	10.4
Nonresidential	96,937	.....	199.5
Oahu Residential	34,179	.....	–12.9
Nonresidential	77,571	.....	327.6
Maui County Residential	10,628	.....	–26.1
Nonresidential	16,035	.....	229.6
Hawaii Residential	40,173	.....	148.8
Nonresidential	2,135	.....	–63.0
Kauai Residential	6,842	.....	–48.9
Nonresidential	663	.....	–81.6
Public Contracts Awarded			
State ($ thous., year to January)	147,448	.....	76.2
Oahu	137,015	.....	146.8
Maui County	9,426	.....	13.7
Hawaii	365	.....	–58.5
Kauai	641	.....	–96.6
By Level of Government			
Federal	12,289	.....	–37.3
State	93,610	.....	303.3
County	41,548	.....	1.7
Real Estate Resales (February)			
State: Single Family (number)	183	.....	–28.5
Average price	360,356	.....	–3.2
Condominium (number)	212	.....	–59.6
Average price	215,028	.....	2.8
Oahu: Single Family (number)	94	.....	–35.2
Average price	451,718	.....	–2.3
Condominium (number)	158	.....	–56.8
Average price	210,229	.....	6.6
Maui County: Single Family (number)	20	.....	–44.4
Average price	435,050	.....	41.7
Condominium (number)	34	.....	–63.4
Average price	278,776	.....	–4.9
Hawaii: Single Family (number)	52	.....	–3.7
Average price	175,773	.....	–8.4
Condominium (number)	14	.....	–65.0
Average price	129,170	.....	–12.9
Kauai: Single Family (number)	17	.....	–19.0
Average price	331,912	.....	2.0
Condominium (number)	6	.....	–76.9
Average price	180,500	.....	6.4

*p = preliminary *Annual rate **Incremental change*

Occupancy Rates

February 1990 vs February 1991



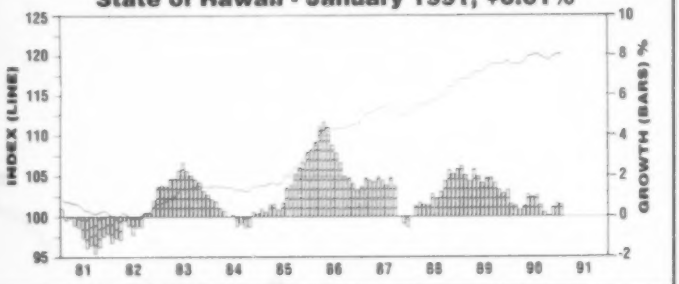
Hotel occupancy rates for February fell from year ago figures due to the slump in both westbound and eastbound traffic. The decline in the westbound market was partly recession driven, but the slump in the eastbound market was war driven. The downturn was more serious for Maui and Oahu.

Hawaii Public Assistance

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Unemployment Insurance (February)			
Insured Unemployment (wkly. avg.)	7,692	9.4	39.8
Intrastate Initial Claims	6,019	-1.7	66.3
Interstate Initial Claims	219	7.8	15.0
Benefits ($ thous., year to date)	11,612	.....	37.2
Income Maintenance (January)			
Recipients (no. persons)	53,133	-0.3	3.0
Payments ($ thous., year to date)	11,245	.....	7.6
Medical Assistance (February)			
Recipients (no. persons)	50,445	11.8	-1.5
Payments ($ thous., year to date)	38,594	.....	16.7
Food Stamps (December)			
Recipients (no. persons)	80,461	0.0	0.9
Payments ($ thous., year to date)	84,861	.....	12.5
Services (4th qtr.)			
Recipients (no. cases)	6,537	-3.9	-7.5
Payments ($ thous., year to date)	27,027	.....	-10.4

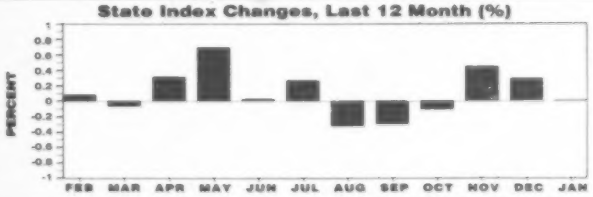
First Hawaiian Bank Index of Leading Economic Indicators

State of Hawaii - January 1991, +0.01%



The First Hawaiian Bank Index of Leading Economic Indicators remained unchanged for January after posting increases for November and December. Average workweek hours was the weakest component, reflecting some weakness in the economy even prior to the Gulf war; the January workweek hour survey was taken during the week of the 6th. Honolulu was the only county that registered an increase for January. The Honolulu index showed strongest gains in construction contract activity and labor market conditions.

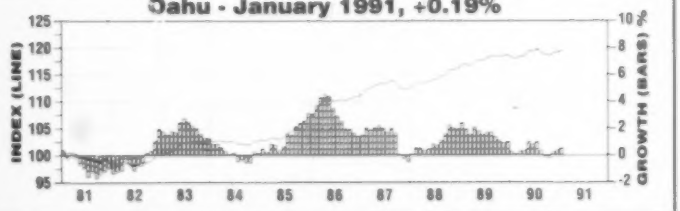
State Index Changes, Last 12 Month (%)



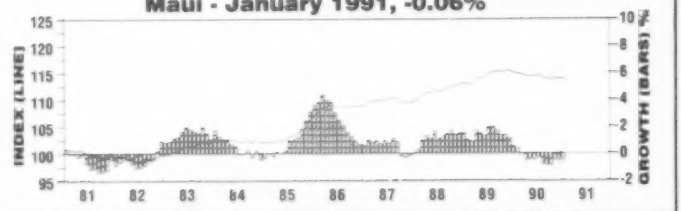
January State Index Component Changes

Trade-weighted Exchange Rate	+0.99%	Visitor Count	-0.33%
Credit Demand	+0.71%	National Leading Index	-0.40%
Construction Contracts	+0.66%	Expected Purchasing Power	-0.56%
Monetary Policy	+0.61%	Labor Market Conditions	-0.65%
Hawaii Stock Index	+0.02%	Average Workweek Hour	-1.98%

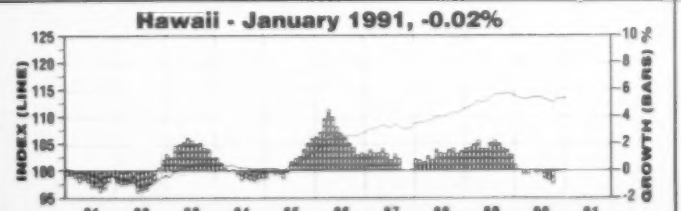
Oahu - January 1991, +0.19%



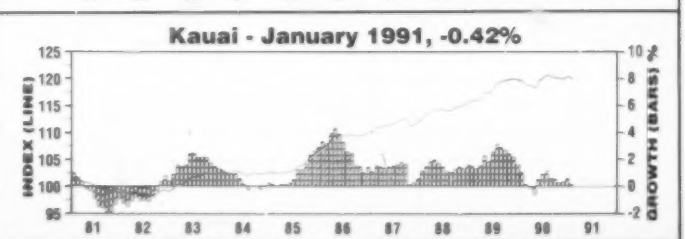
Maui - January 1991, -0.06%



Hawaii - January 1991, -0.02%



Kauai - January 1991, -0.42%



ECONOMIC INDICATORS

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A Publication Facelift

First Issue August 28, 1961

First Revision January 1989

Second Revision January/February 1984

This issue of *Economic Indicators* is marked by several changes. The front cover will continue to be devoted to commentary on a current economic theme. The next two pages will feature an in-depth article dealing with a subject that relates to the Hawaii economy, or with a national or international economic topic that affects the state. This space on the back will henceforth contain a summary of current business trends. An annual County Supplement for each of the four counties will be continued.

Data tables will be grouped on pages four to seven. Several data series have been discontinued due to space limitations, but they may be obtained on request. A relatively large number of series are still reported, and a section on international data, dealing with Japan and other Hawaii trade/tourism/investment partners, has been added.

The data section will be enhanced with charts, highlighting various economic developments. The leading economic indicators series will now be reported as the last item in the data section.

First Hawaiian's publication ... far predates most existing bank economic newsletters of the same genre.

As economic newsletters go, First Hawaiian's publication has quite a heritage. It far predates most existing bank, and even central bank, economic newsletters of the same genre. It was begun in 1961, shortly after the establishment of the Research Department. We hope and believe this most recent transformation will continue in the fine tradition that has been established over the years.

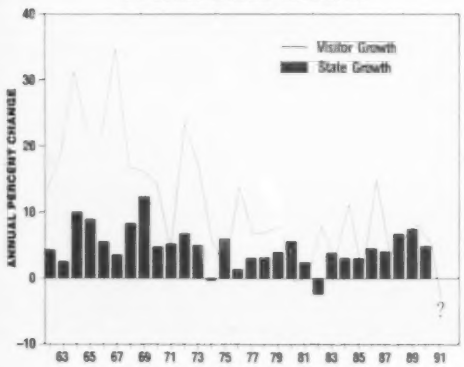
ECONOMIC INDICATORS

Research Department
First Hawaiian Bank
May/June 1991

Hawaii's Non-Tourism Cushion and 1991 State Growth

The visitor industry is recovering slowly, but 1991 state recession still cannot be ruled out. Recent projections indicate a record decline in the visitor count this year. This is notable because there has been only one decline in total visitor count since 1959 statehood—a very minor one in 1980. Yet as the chart shows, there is little correspondence between visitor growth and overall real state product growth. The two years when state recession did occur match years of the most serious national recessions, but in those years visitor growth was positive.

Visitor Growth vs. Overall State Growth



Does this mean a recession is still avoidable in 1991? There are other important sources of state growth: construction is a major impetus, and the government sector is a stabilizing influence. Obviously beyond some point the contraction in the state's major industry, tourism, will drag the entire economy down. But what is that point? How far can tourism contract this year without bringing on a 1991 state recession?

This question is obviously on the mind of those who forecast the state economy, but others also, including all who must plan for the future. First Hawaiian's state economic model sheds light on the answer, but the response first requires some reasonable conjecture about other things.

Major assumptions in results to follow are: that construction spending (private and public) will be driven roughly by permit growth in inflation-adjusted terms last year; that the national economy in 1991 will perform close to what the consensus of forecasters now believe; that government employment will continue to grow conservatively at about the rate it has in the past few years (so far, except for lower hours worked there are few signs of weakness in the state labor market, and the public sector has taken up much of the slack); and finally that the composition of visitors who do come this year will be similar to last year (important because of spending pattern differences). This exercise is more a sensitivity analysis framing general linkages than an explicit forecast, but outcomes are revealing.

If the visitor industry has flat 1991 growth (percent change in total visitors at exactly zero), we calculate that Hawaii's economy would still show just under 2.0% growth in real gross state product for the year. While not spectacular for an economy that has grown in the 4-7% range for the last five years, this does avoid recession. As we have emphasized before, even prior to the Gulf war and visitor cancellations early this year we were predicting lower 1991 growth than in any year since the last state contraction in 1982.

Yet recent projections for the year's visitor growth are not just flat; they are negative. Our analysis now shows, other things equal, that total visitor count can decline as much as 6% before the state's overall real economic activity threatens to turn negative for the year. Real gross state product growth in 1991 is shown to fall about 0.3% for every 1.0% drop (in 1991 over 1990 yearly levels) for total visitors.

Our analysis now shows that total visitor count can decline as much as 6% before the state's overall real economic activity threatens to turn negative for the year.

So a 1991 recession is possible. But it should be emphasized once again that an application such as this requires assumptions that easily could change between now and year-end, for better or worse. More adverse developments than assumed above in other factors would deplete the economy's non-tourism support more rapidly. Higher construction activity here or stronger public sector growth, a resurgence in the high inertia Japanese visitor market, or better U.S. national performance, would yield a more optimistic trade-off.

The important thing to remember is that the business cycle, in Hawaii as elsewhere, always moves up or down. These gyrations are important, but there is nothing magic about crossing the zero line.

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Is Hawaii Short of Capital?

Hawaii's economy, as everyone knows, is characterized by resource shortages. Scarce land and zoning restrictions drive housing prices and rents sky-high. Scarce labor drives wages up and keeps unemployment at low levels. Can an economy be that short of all the major resources that serve as factors of production and still grow at the phenomenal rates Hawaii has experienced in recent years?

The other major input to economic growth is capital. Many believe Hawaii is short of capital also, driving up borrowing costs here and attracting foreign investment. While there is a perception that Hawaii has always depended on outside money, the large influx of Japanese investment here in the past half- decade has reinforced this impression. Sometimes this capital shortage view is even mentioned in support for things like interstate banking, accompanied by arguments that interest rates here would fall with larger capital inflows caused by out-of-state branches lending more here.

All economies have some *relatively* scarce and some *relatively* plentiful factors of production. We suggest here that capital is actually abundant in Hawaii, at least compared to other factors like land and labor. Unless "capital-short" is taken trivially to mean that financing is not free, this label does not apply to Hawaii's economy.

The External Balance and the Savings/Investment Balance as Capital Availability Indicators. It is hard to refute Hawaii's alleged capital shortage directly. At a basic level, we need to know whether the net flow of capital for Hawaii is inward or outward, because a capital-short economy must borrow capital from abroad while a capital- abundant economy has funds left over to invest abroad. But borrowing and lending activities of the state's businesses and individuals are very hard to monitor accurately.

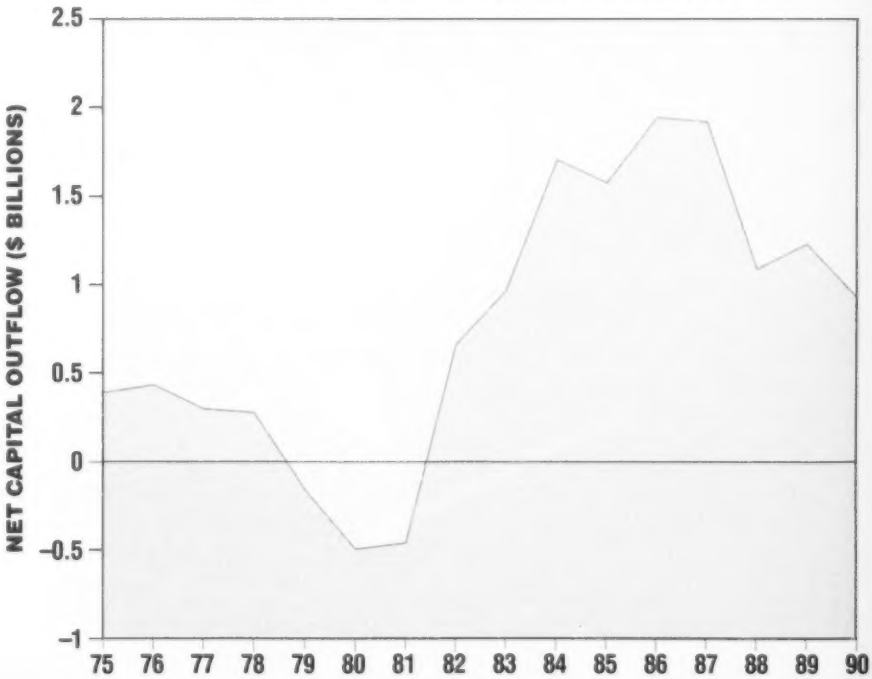
If a financial institution here loans money to Tonga, for example, or if a Hawaii citizen buys a Treasury bill from a mainland broker, it is not likely to be recorded in the state's official data. Likewise from the inward direction, it is impossible to systematically record transactions like Japanese purchases of residences here, or a Hawaii citizen building up charges on a mainland institution's credit card.

There is an easier, if indirect, way to measure Hawaii's net capital availability in the aggregate, however. In the state income and product accounts, the difference between internal (public and private) gross savings and investment must equal the amount of total capital that enters or leaves the state each period. This external balance corresponds exactly—as a result of state income accounting, after the fact, as much as economics—to the current account of the state's balance of payments, or its net external trade in goods and services.

Measuring the items that constitute the current account in the external balance is less complicated, especially for an island economy like Hawaii's where exports and imports can be monitored relatively closely. There are measurement problems even here, of course, involving things like estimation of import values for air freight shipments and the export contribution of various tourism expenditures. But these problems are less troublesome than those that would be caused by attempts to survey directly the capital flows that are the mirror image of the current account.

A current account surplus and an excess of local savings over total investment here are actually just two ways of indicating the same thing—that there is a corresponding capital outflow from the economy. Likewise, a current account deficit indicates excess demand for capital; net investment must flow into the state to finance that deficit and to fill the gap between the investment

Hawaii's Net External Balance



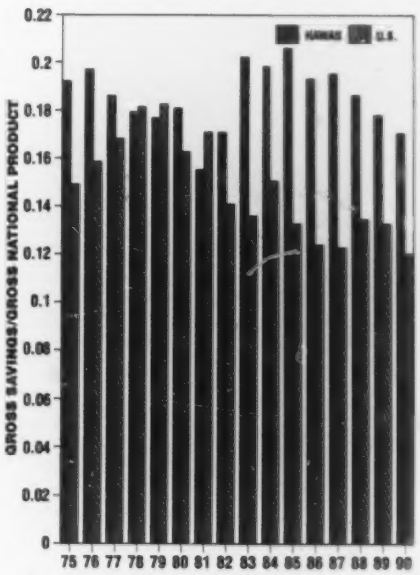
that occurs here and the lower level of local savings to finance that investment.

Hawaii's Recent Capital Outflow and Its Causes. Chart 1 shows the net external balance of the state vis-a-vis the outside world—U.S. mainland as well as foreign countries—over the past 15 years. The striking thing about the chart is that if it were shown to an otherwise knowledgeable person, without the labels so he did not know whether a positive amount represented an inflow or an outflow of capital, he would probably say it was a net inflow rather than an outflow. About the time the net outflow begins to increase markedly in the mid-1980s is the same time that large and highly visible Japanese inflows started to arrive, so the wrong conclusion is understandable.

But another thing began to occur then that added to Hawaii's current account surplus and net capital outflow. The predominant item in Hawaii's exports is tourism services, which began to climb in the mid-1980s with the arrival of Japanese visitors who generally spent more than their non-Japanese counterparts. Hawaii's merchandise imports, which are the same order of magnitude as its tourism exports, did not rise as much.

Other developments also contributed. Underlying the higher external surplus was an uptrend in the state's savings rate. Chart 2 shows that Hawaii's gross savings (including personal, business, and government savings)—relative to overall state income—is substantially higher than the national average. In fact, the only time the national savings ratio approached that of the state (due to a fall in the state's ratio as well as a larger rise in the national ratio) was about the turn of the 1980s decade, the same period when Chart 1 shows our current account dipping into deficit. Given the relationships outlined in the previous section, this is not surprising.

Gross Savings Ratios
Hawaii vs. U.S.



Composition of Hawaii's Capital Flows. Because the net capital flows that fall out of the state accounts are not observed directly, we can only infer their composition. The capital balance can be composed of all kinds of funds flows, of course. It can include direct investment in real property such as houses, hotels, golf courses, and resorts—or portfolio investment in things like equities, mutual funds, fixed income securities, deposits to financial institutions, loans and their repayments, or even currency. Financial instruments involved can be long or short term in maturity. The investment can be public—for example, the state's investing its budget surplus out-of-state or financing its deficit from outside sources—or private, as businesses and individuals invest abroad or seek external financing.

For Hawaii, the net flow of long-term direct investment—involving construction and resort development as well as residential and other real property purchases—is inward. This has been quite obvious recently. But it follows that whatever funds flowed out must have been large enough in recent years to have overwhelmed this direct investment inflow and even caused a substantial overall outflow. These outflows are likely to be largely financial in nature. They would include government surpluses invested abroad, corporate pension funds, insurance flows, lending by financial institutions and changes in their portfolio holdings, and an entire array of other individual, corporate, or public investment outside the state.

Any economy that is a net exporter of capital as Hawaii is, with its capital surplus position fueled by a relatively high savings rate, is not in a conventional sense short of capital.

Conclusion. Unlike land, which is absolutely immobile, and labor, which moves only glacially with relatively small immigration flows, capital as an input to economic production moves quite freely. With today's globally integrated capital markets, that movement is faster, more efficient, and more far-ranging than ever. In such a world, it makes little sense to label one region "capital-poor" and another "capital-rich," because the world's capital stock will gravitate rapidly toward its highest risk- adjusted return regardless of geography and to an extent even regardless of politics.

Hawaii actually is like many regional economies, a net recipient of long-term direct investment capital and a net provider of funds to outside financial centers. But any economy that is a net exporter of capital as Hawaii is, with its capital surplus position fueled by a relatively high savings rate, is not in a conventional sense short of capital.

Hawaii Population & Income

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Population			
State residents (thous., Apr. 1, 1990)	1,108.2	.....	.....
de facto	1,248.4	.....	.....
Oahu residents (thous., Apr. 1, 1990)	836.2	.....	.....
de facto	908.0	.....	.....
Maui residents (thous., Apr. 1, 1990)	100.5	.....	.....
de facto	137.3	.....	.....
Hawaii residents (thous., Apr. 1, 1990)	120.3	.....	.....
de facto	135.1	.....	.....
Kauai residents (thous., Apr. 1, 1990)	51.2	.....	.....
de facto	68.0	.....	.....
Military personnel (thous., July 1989)	56.4	.....	-12.0
Civilian dependents	60.3	.....	-13.8
Foreign Immigration (no., yr. to Mar.)	1,224	.....	-15.6
Total Personal Income ($ mil., 4th Qtr. 1990)	23,136	6.4*	9.0
Employment Income	17,836	5.1*	10.0
Manufacturing	706	3.5*	4.9
Construction & Mining	1,593	8.5*	11.7
Wholesale	690	3.6*	9.5
Retail	2,019	-0.6*	5.2
Finance, Ins., & Real Estate	1,338	-0.3*	12.9
Trans., Comm., & Utilities	1,525	6.8*	12.8
Services	5,056	5.2*	12.9
Farm & Other	347	-25.9*	2.4
Federal Civilian	1,108	0.4*	1.3
Federal Military	1,444	1.4*	3.5
State & Local	2,009	25.8*	16.1
Property Income	3,019	16.8*	10.4
Transfer Payments: net of personal contributions for social insurance	1,868	25.8*	9.5
Per Capita Personal Income ($, 1989)	18,472	.....	9.7

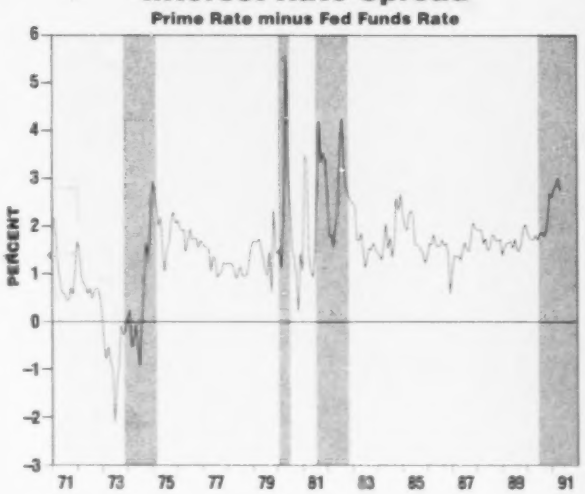
*Annual Rate

International Indicators

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Hawaii Real Trade-Weighted Exchange Rate Index (1980 = 100, Apr.)	112.48	0.3	7.1
Japan			
Real GNP (yen bil., 3rd qtr.)	443,341	4.1*	5.4
Yen/$ exchange rate (Apr.)	137.11	-0.1	-13.5
Current Balance ($ bil., 3rd qtr.)	7.38	-0.5**	-7.5**
Discount rate (%, end Mar.)	6.0	0.0**	0.8**
Long-term prime rate (%, May 1, 1991)	7.5	0.0**	-0.4**
Nikkei Stock Index (avg. Apr.)	26,470	0.0	-9.5
Real GNP/GDP, Other Hawaii Trade Partners (1985 Prices)			
Canada (GDP, bil. C$, 1990)	551.8	-4.1*	-1.0
Australia (GDP, bil. A$, 3Q: 1990)	261.17	1.8*	-0.6
New Zealand (GDP, mil. NZ$, 1989)	45,597	.....	0.9
Korea (GDP, bil. won, 1989)	120,429	.....	6.1
Taiwan (GNP, bil. NT$, 4Q: 1990)	987.4	3.6	3.9
Singapore (GDP, mil. SGD, 1989)	52,679	.....	9.2
Philippines (GNP, bil. pesos, 4Q: 1990)	200.98	63.4*	1.8
United Kingdom (GDP, bil. £, 3Q: 1990)	414.3	-5.0*	0.6
Germany (GNP, bil. DM, 4Q: 1990)	2,176.7	1.5*	4.8

*Annual Rate **Incremental change

Interest Rate Spread



The spread between banks' prime rate and the central bank-controlled Federal funds rate has been used recently as a gauge of the "credit crunch." But this spread always widens in recessions, often turning down just prior to recession's end.

U.S. Economic Indicators

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Gross National Product ($ bil., 1st Qtr.)	5,562.3p	2.6*	3.5
In 1982 dollars	4,123.9p	-2.8*	-0.6
Personal Income (March)	4,745.9p	1.0*	3.3
Real Per Capita Disposable Income (1982 dollars, 1st qtr.)	11,301p	-0.7	-2.5
Productivity Index Nonfarm business sector (1982 = 100, 4th Qtr.)	111.0	0.1	0.0
Civilian Employment (mil., April)	117.4	0.5	-0.6
Unemployment rate (%, April)	6.6	-0.2**	1.3**
Capacity Utilization (%, March)	78.7p	-0.4**	-4.7**
Consumer Confidence Index (1985 = 100, May)	74.2	-6.5	-30.8
Price Indexes			
CPI-U (1982-84 = 100, April)	135.2	2.4*	4.9
PPI-Finished Goods (82 = 100, Apr.)	120.9	2.4*	3.2
Prime Interest Rate (%, April)	9.0	0.0**	-1.0**
Federal funds rate (%, April)	5.9	-0.2**	-2.4**
3-Month Treasury bill (%, April)	5.7	-0.3**	-2.1**
30-Year Treasury bond (%, April)	8.2	-0.1**	-0.5**
Money Supply (M2, $ bil., seas. adj., April)	3,385.3p	0.9*	3.2
Domestic Nonfinancial Debt ($ bil., February)	10,544.9	0.5	6.6
Corporate Profits—After Tax ($ bil., 4th Qtr.)	177.6r	-1.0	6.8
Common Stock (DJIA, April)	2,925.54	0.2	8.0
Current Balance ($ bil., 4th Qtr.)	-29.3p	1.4**	-1.3**
Trade Balance ($ bil., 4th Qtr.)	-33.1p	-0.8**	-2.3**

r = revised p = preliminary *Annual rate **Incremental change

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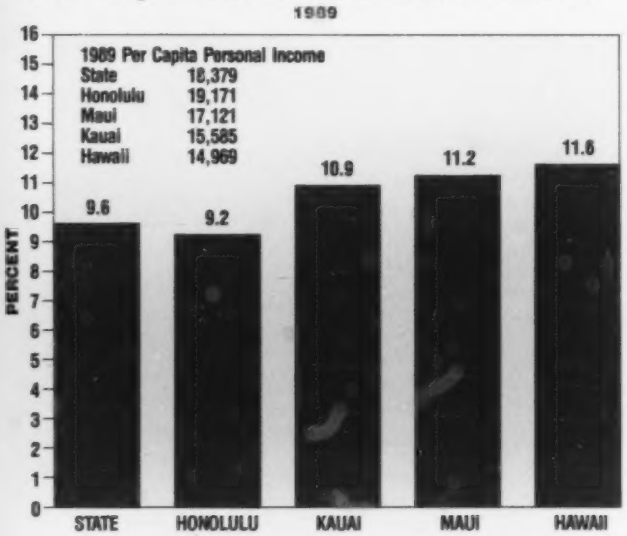
Per Capita Personal Income Growth



Just released 1989 figures indicate that Honolulu County still leads the state in per capita personal income. However, the annual growth rates of the neighboring counties were higher.

Hawaii Banking & Finance

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Commercial Bank Deposits ($ bil., 12-month ending March)			
State Total Deposits	151.7	.....	13.1
Debits to demand deposits	225.1	.....	21.8
Oahu Total Deposits	127.4	.....	15.1
Debits to demand deposits	206.1	.....	22.5
Maui Total Deposits	10.6	.....	10.0
Debits to demand deposits	8.3	.....	16.1
Hawaii Total Deposits	10.7	.....	14.8
Debits to demand deposits	7.3	.....	17.5
Kauai Total Deposits	5.0	.....	11.2
Debits to demand deposits	3.4	.....	9.9
Bank Loans Outstanding ($ mil., 1st Qtr.)			
State	9,383.3	1.0	13.0
Real Estate	4,708.4	5.3	20.9
Consumer	1,255.4	–4.1	–3.0
Commercial & Industrial	2,796.7	–1.1	13.7
Other	537.3	–7.6	8.1
Conventional Home Mortgage Rate			
Honolulu (%, March)	8.08	–0.91**	–1.84**
State Tax Collections ($ mil., Apr.)	943.3	.....	14.2

**Incremental change*

Hawaii Employment & Jobs

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Civilian Employment (thous., March)			
State Labor Force	554.6p	0.2	3.7
Employment	540.3p	0.1	4.1
Unemployment rate (%)	2.6p	0.1**	–0.4**
Oahu Labor Force	402 1p	0.1	1.8
Employment	392.9p	0.1	2.4
Unemployment rate (%)	2.3p	0.0**	–0.5**
Maui Labor Force	58.6p	–0.7	7.2
Employment	57.0p	–0.3	7.1
Unemployment rate (%)	2.6p	–0.4**	0.0**
Hawaii Labor Force	64.0p	0.6	10.9
Employment	61.7p	0.2	11.6
Unemployment rate (%)	3.6p	0.3**	–0.6**
Kauai Labor Force	30.0p	1.4	8.1
Employment	28.8p	–2.9	8.3
Unemployment rate (%)	4.0p	0.9**	–0.1**
Job Count by Industry (thous., March)			
Total Jobs—State	583.3p	–0.9	1.0
Oahu	445.4p	0.8	11.3
Maui County	55.1p	0.5	1.7
Hawaii	58.7p	1.1	5.5
Kauai	29.1p	1.4	5.3
Sugar (mill & field)	5.5p	–0.9	–3.5
Pineapple (cannery & field)	2.8p	–13.8	–17.6
Diversified Agriculture	7.9p	–1.3	10.6
Diversified Manufacturing	16.4p	–0.6	–3.2
Durable goods	4.1p	–1.2	–6.8
Non-durable goods	12.3p	–0.4	–1.6
Apparel & textiles	2.0p	–2.4	–14.9
Contract Construction	32.5p	0.5	3.8
Transportation	32.3p	–0.9	3.9
Communication	7.3p	0.7	0.0
Utilities	3.1p	0.0	1.7
Retail Trade	112.8p	0.1	0.4
Wholesale Trade	22.4p	–0.7	1.4
Finance, Insurance, & Real Estate	37.7p	0.7	4.1
Hotel Services—State	38.9p	–2.0	7.2
Oahu	18.7p	–3.9	4.5
Maui County	9.0p	0.0	2.3
Hawaii	6.8p	–0.7	12.5
Kauai	4.5p	–1.1	21.6
Other Services	118.4p	0.3	1.7
Federal Government	32.3p	0.0	–5.0
Civilian Agencies	13.5p	–0.4	–6.6
Defense Department	18.7p	0.0	–4.1
State Government	63.7p	2.7	6.2
County Government	14.4p	0.3	3.2
Non-Agriculture Self-Employed	40.2p	12.2	–0.7

**Incremental change*

Dr. Leroy O. Laney, Vice President and Chief Economist
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Hawaii Business Activity

Series/Unit/Period	Level	Percent Change: preceding period	Percent Change: year ago
State Gross Business Receipts			
($ mil., year to March)	10,851.8	.....	5.6
Diversified Manufacturing	157.9	.....	–8.6
Diversified Agriculture	83.3	.....	–11.0
Retailing	3,517.5	.....	0.4
Wholesaling	2,837.6	.....	6.8
Services	2,555.8	.....	4.6
Construction	1,090.0	.....	25.6
Other	609.7	.....	10.6
Retail Car Sales—State			
(Number, year to April)	13,275	.....	–3.8
Oahu	10,026	.....	–1.4
Maui	1,256	.....	–1.1
Hawaii	1,438	.....	–6.1
Kauai	519	.....	–34.6
Honolulu CPI (1982-84 = 100, 2nd half 1990)			
Urban Wage Earners &			
Clerical Workers	141.6	7.8*	7.3
All Urban Consumers	140.8	7.8*	7.4
Tourism (Number, April)			
Overnight or Longer Visitors	515,700p	–0.6	–8.1
year to date	1,998,880p	.....	–12.2
Westbound Visitor Count	360,270p	–7.0	–7.9
year to date	1,403,000p	.....	–10.7
Oahu	221,300p	–10.8	–14.2
year to date	892,670p	.....	–12.0
Maui County	155,180p	–7.6	–8.3
year to date	594,020p	.....	–11.5
Hawaii	82,760p	–4.8	6.2
year to date	326,850p	.....	–4.3
Kauai	91,430p	2.4	–0.5
year to date	326,920p	.....	–8.6
Average Daily Census	110,140p	–9.1	–6.7
Average Length of Stay (days)	9.2p	–5.5	–0.3
Eastbound Visitor Count	155,430p	0.0	–8.7
year to date	595,880p	.....	–15.5
Oahu	147,150p	18.5	–10.9
year to date	569,950p	.....	–16.9
Maui County	32,810p	26.3	7.5
year to date	115,580p	.....	–5.7
Hawaii	14,410p	5.6	3.1
year to date	58,790p	.....	7.6
Kauai	13,850p	24.3	–7.5
year to date	51,200p	.....	–12.7
Average Daily Census	30,360p	14.8	–4.5
Average Length of Stay (days)	5.9p	–5.5	4.6
Hotel Occupancy Rate—State			
(%, March)	64.9	–6.3**	–17.6**
year to date	67.7	.....	–16.0**
Oahu	67.9	–12.9**	–25.3**
year to date	73.9	.....	–17.1**
Maui Island	65.3	9.5**	–12.7**
year to date	60.0	.....	–15.5**
Hawaii	57.0	–0.1**	–10.7**
year to date	58.4	.....	–13.7**
Kauai	53.7	6.2**	–17.3**
year to date	52.3	.....	–16.0**

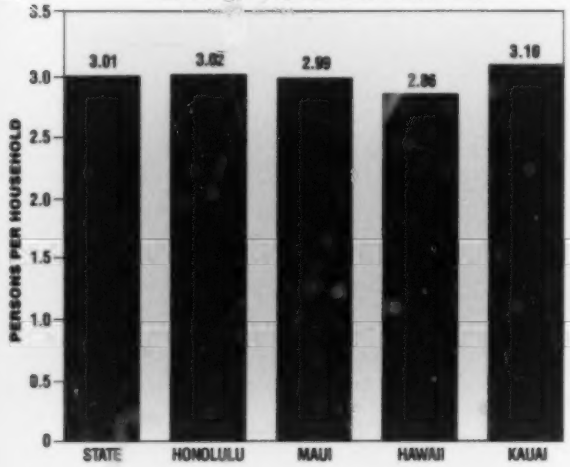
*p = preliminary *Annual rate **Incremental change*

Hawaii Business Activity *(Cont.)*

Series/Unit/Period	Level	Percent Change: preceding period	Percent Change: year ago
Defense Appropriations			
Total Funds ($ mil., 1990)	1,927[1]	.....	3.8
Military payroll	930[1]	.....	6.7
Civilian payroll	630[1]	.....	–0.3
Local purchases	367[1]	.....	4.3
Agriculture (Year to March)			
Sugar Production (thous. tons)	65.5	.....	–16.0
Price per ton	431.80	.....	–7.0
Pineapple Production (thous. tons)	58,271	.....	–11.7
Honolulu Construction Cost Indexes (Apr.)			
Single Family (1982 = 100)	149.8	.....	6.7
High Rise (1982 = 100)	146.8	.....	8.4
Private Permits ($ thous., year to Mar.)			
State Residential	596,360	.....	109.5
Nonresidential	226,594	.....	76.7
Oahu Residential	404,744	.....	277.5
Nonresidential	172,216	.....	123.8
Maui County Residential	35,443	.....	–25.2
Nonresidential	20,412	.....	12.2
Hawaii Residential	134,995	.....	56.4
Nonresidential	11,182	.....	–36.0
Kauai Residential	21,178	.....	–51.6
Nonresidential	22,109	.....	42.0
Public Contracts Awarded			
State ($ thous., year to March)	287,144	.....	111.3
Oahu	251,547	.....	185.0
Maui County	11,350	.....	–51.2
Hawaii	3,140	.....	56.4
Kauai	21,105	.....	–5.6
By Level of Government			
Federal	56,350	.....	162.9
State	174,848	.....	178.6
County	55,945	.....	8.2
Real Estate Resales (March)			
State: Single Family (number)	189	.....	–56.8
Average price	395,230	.....	–3.8
Condominium (number)	263	.....	–64.5
Average price	201,923	.....	–9.2
Oahu: Single Family (number)	97	.....	–61.5
Average price	521,008	.....	5.9
Condominium (number)	205	.....	–63.2
Average price	204,036	.....	–6.1
Maui County: Single Family (number)	29	.....	–40.8
Average price	349,120	.....	–23.7
Condominium (number)	31	.....	–72.6
Average price	227,325	.....	–13.0
Hawaii: Single Family (number)	57	.....	–48.2
Average price	221,600	.....	15.7
Condominium (number)	19	.....	–65.5
Average price	147,653	.....	–25.9
Kauai: Single Family (number)	6	.....	–77.8
Average price	234,167	.....	–49.2
Condominium (number)	8	.....	–50.0
Average price	178,250	.....	–13.4

*p = preliminary *Annual rate **Incremental change [1] = Does not include Air Force*

Household Densities



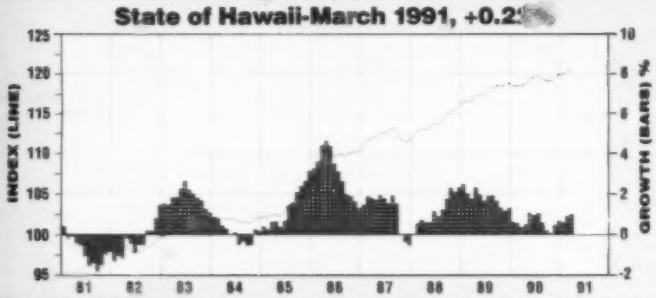
The 1990 Census figures for Hawaii show that Kauai has the highest household density, and the Big Island the lowest. In spite of the highest population growth rate in the state, Maui has held its household density below the state average.

Hawaii Public Assistance

Series/Unit/Period	Level	Percent Change: preceding period	Percent Change: year ago
Unemployment Insurance (April)			
Insured Unemployment (wkly. avg.)	9,335	14.2	55.2
Intrastate Initial Claims	3,705	–42.5	14.6
Interstate Initial Claims	301	8.3	24.9
Benefits ($ thous., year to date)	26,023	.....	54.3
Income Maintenance (April)			
Recipients (no. persons)	55,131	0.8	4.6
Payments ($ thous., year to date)	45,714	.....	8.5
Medical Assistance (April)			
Recipients (no. persons)	50,293	–10.9	11.1
Payments ($ thous., year to date)	84,821	.....	20.1
Food Stamps (March)			
Recipients (no. persons)	82,733	0.7	3.1
Payments ($ thous., year to date)	24,750	.....	21.7
Services (1st qtr.)			
Recipients (no. cases)	6,476	–0.9	7.0
Payments ($ thous., year to date)	4,136	.....	–59.4

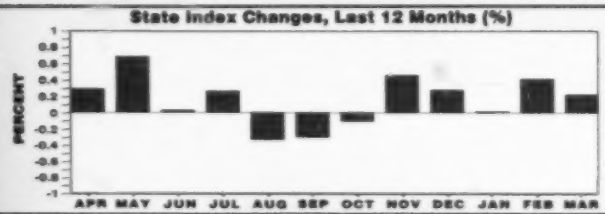
First Hawaiian Bank Index of Leading Economic Indicators

State of Hawaii-March 1991, +0.2%



The First Hawaiian Bank Index of Leading Economic Indicators increased by 0.2 percent for March. The credit demand component, a broad-gauged measure of economic health, showed the greatest strength. The second largest increase was from the tourism component, which rebounded after three monthly declines. This tourism gain was due to a rebound in Hawaii's tourism traffic following the end of the war, and was distorted because it is compared with the hotel strike period of March 1990. The largest decliner was the real trade-weighted exchange rate component, which reflected the strengthening of the dollar against other currencies. All county level indexes increased.

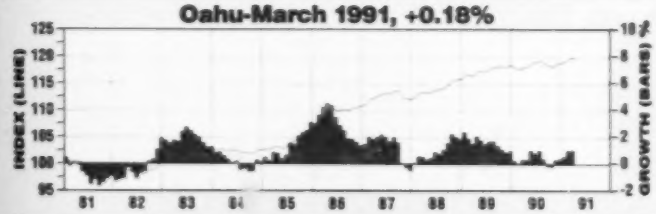
State Index Changes, Last 12 Months (%)



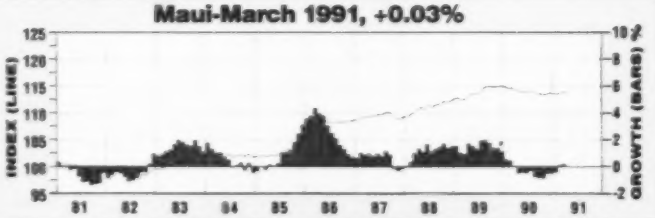
March State Index Component Changes

Credit Demand	+1.02%	Labor Market Conditions	+0.19%
Visitor Count	+1.01%	Expected Purchasing Power	–0.30%
Construction Contracts	+0.75%	Average Workweek Hour	–0.61%
National Leading Index	+0.50%	Trade-weighted Exchange Rate	–2.56%
Hawaii Stock Index	+0.42%		
Monetary Policy	+0.20%		

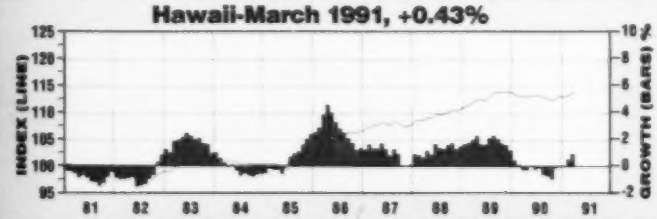
Oahu-March 1991, +0.18%



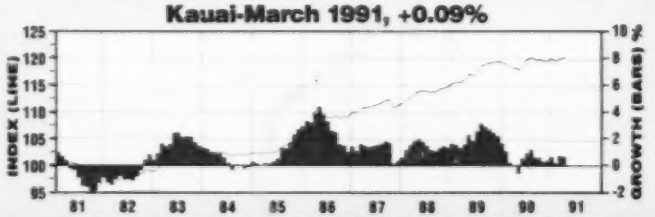
Maui-March 1991, +0.03%



Hawaii-March 1991, +0.43%



Kauai-March 1991, +0.09%



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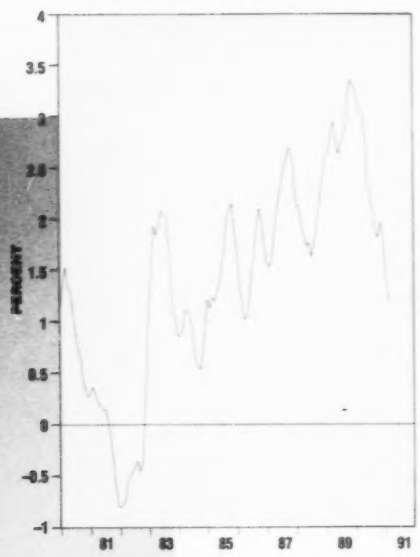
Current Business Trends: Hawaii's Ironclad Labor Market

Job Count Growth
Seasonally Adjusted, Smoothed Data



If a tourism-driven recession now threatens Hawaii, it has yet to impact the labor market as might be expected. The unemployment rate has held in the 2 percent range, insulated by reduced hours worked and somewhat weaker job count growth.

The job count series, published monthly, can be a useful coincident indicator in regional economies for which broader measures are not available as frequently. In Hawaii, widespread multiple job holding in our service oriented economy means some job losses do not result in unemployed workers.

The chart shows state job count growth, seasonally adjusted and smoothed, over the previous decade. During Hawaii's last recession in 1981-82, the number of jobs clearly fell. Even though there has been some decline in job growth recently, we have not had negative growth.

Reduced hours worked can shield both the unemployment rate and the job count, and non-tourism sectors absorb some of the slack. Hours worked in the hotel industry fell in first quarter 1991, but they rose in the construction sector. Government employment also frequently moves counter to the economy, rising in periods of economic weakness and falling in boom periods.

Reduced hours worked can shield both the unemployment rate and the job count, and non-tourism sectors absorb some of the slack.

These buffering factors mean that even in periods of economic weakness incomes are protected more than would be the case with massive layoffs in structurally different economies. Hawaii's tight labor market has so far persisted through this business cycle.

ECONOMIC INDICATORS

Research Department
First Hawaiian Bank
July/August 1991

Japanese Tourism and Investment: Can Both Grow Forever?

Hawaii's economic linkages to Japan obviously are far more important than for other U.S. states. The two most apparent channels of influence operate via investment and tourism.

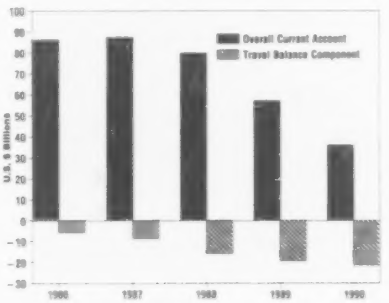
Japanese investment, which sent massive capital inflows to the state in the 1980s, has been slowing recently for several reasons. Things like the impact of international capital adequacy rules on Japanese bank lending here and a saturation of the higher end resort market will take their toll. In the long run, Japanese investment interest in Hawaii will remain important, but it will continue to slow down in the near term.

Japanese tourists are now a crucial element in our visitor industry; they contributed 27% to total 1990 state tourism expenditures. The pall cast over Hawaii's tourism by the Gulf war, due in large part to Japanese cancellations, demonstrated this importance. Japanese visitors are all the more vital for their spending patterns. Revised estimates still show Japanese visitors spend around twice as much per day as U.S. visitors, and close to three times as much as those from several other nations.

Overall Japanese foreign travel has exploded in recent years, encouraged by official policies. In 1990, total Japanese foreign travelers passed the 10 million mark, achieving one year early a goal set by the Japanese Ministry of Transport. Higher duty free limits for returning Japanese tourists are another example of official incentives to increase tourism outflows in their balance of payments. A stronger yen, higher incomes, and more leisure time have all played a part in this growth. An estimated 80% of Japanese foreign travel is recreation-driven.

Hawaii's tourism and investment from Japan are related, of course. Japanese investment in resort properties here can foster more Japanese visitors to fill those properties in the future. It is sometimes not recognized, however, that at the global level a trade-off can exist between these two engines of state economic growth. Growing Japanese tourism may eventually contribute to less net Japanese investment worldwide.

Japan's Current Account Surplus vs. Travel Deficit Component



Japanese tourism growth has pushed their nation's foreign travel balance increasingly into deficit. Travel to Japan has grown but not nearly as fast. This deficit has played an important role in reducing the overall Japanese current account surplus of which it is a part. And the size of the current account surplus determines the net amount that Japan is able to invest abroad each period. As the chart shows, the current account surplus has declined markedly at the same time the foreign travel deficit has grown.

Hawaii will increasingly look to tourism as the Japanese economic connection of greater significance in the near term.

The Japanese visitor market is now recovering from its 1991 war-related contraction, and the longer term outlook for foreign travel from Japan is solid. (Interestingly, just as airport expansion delays are a constraint on tourism here in Hawaii, in Japan these delays also frustrate the addition of international flights during peak travel periods. This is often cited as a drag preventing even faster Japanese tourism growth.)

Rising Japanese tourism and a declining net investment balance do not necessarily mean we will see the exact same trends at the state level. Japanese direct investment can still come to Hawaii at the same time we enjoy the blessings of Japanese tourist expenditures, and a positive association between tourism and previous Japanese investment will continue. Yet current developments do corroborate the aggregate trade-off pattern: incoming Japanese investment here has in fact been lower, while Japanese tourism continues to promise a bright future. Hawaii will increasingly look to tourism as the Japanese economic connection of greater significance in the near term.

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Inflation in Honolulu

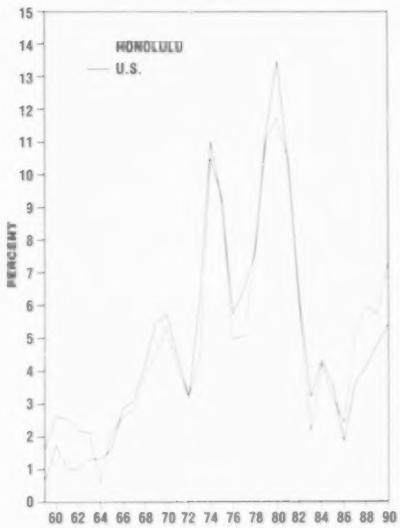
One eagerly awaited business statistic is the Honolulu Consumer Price Index (H-CPI), which is published twice yearly by the U.S. Bureau of Labor Statistics. The next number will be released at approximately the time this **Economic Indicators** is published. The H-CPI is often used to adjust current dollar values to reflect noninflationary growth rates, and for escalator clauses in several kinds of legal contracts. It also helps individuals generally gauge how well they are keeping pace with inflation. Since no other government inflation indicators are published for the neighbor islands, the H-CPI is often used to proxy neighbor island inflation.

For the past several years, the H-CPI has sent jitters through the community. As the graph shows, inflation in Honolulu—which ran parallel to the nation's from 1964 to 1986—has been diverging. As residents know, inflationary pressures have been increasing, and it is getting more difficult to make ends meet. The second-half 1990 inflation rate for Honolulu was 7.4 percent over the same period of the previous year, the highest since the mid-1980s. At the end of 1990, Honolulu inflation was approximately 2 percentage points higher than national inflation.

Hawaii has a history of being a high cost-of-living state. Higher land costs lead to higher operating expenses for all businesses, which translate into higher prices for a variety of goods and services. Hawaii's distance from U.S. mainland suppliers leads to less control over local inventory, contributing to higher costs. There have also been arguments that the islands' isolation fosters less competition among Hawaii's businesses and with mainland counterparts.

Yet while Hawaii's geography can lead to higher living costs, it does not have to lead to higher inflation rates. Inflation reflects a general **rise** in prices. In prior years, Hawaii's residents had to cope with higher costs, but price increases were in line with the nation. Nowadays, residents must also deal with prices that are rising faster than the nation's, which leads to a cost-of-living that is also getting higher.

Consumer Price Index
Honolulu vs. U.S.



The spiraling inflation rate in Honolulu cannot be attributed entirely to the state's economic growth or tight labor market. It is true that, for the past several years, state economic growth has been higher than the nation's. However, this has been true for most of the post-1959 statehood period. While in 1990 the state's economic growth rate was four percentage points higher than the nation's, there were other years that exceeded this spread, 1969 (10 percentage points), 1975 (7 percentage points), and 1980 (6 percentage points). These were times when Honolulu inflation ran parallel with the nation.

Others attribute the inflation rate partly to the labor market. Hawaii has been experiencing a labor shortage since about 1986, and wages especially in many service industries have been bid upward. While the state's per capita personal income increased from 102 to 105 percent of the nation's in 1989, it still remains at relatively low levels as compared with the early 1970s when it ranged from 112 to 122 percent of the nation's.

Probably the most important factor leading to higher inflation is land costs. Higher rents cause higher operating costs, which are passed to consumers. Land assessment values increased 34 percent, 17 percent and 44 percent in 1988, 1989 and 1990, respectively.

Given Honolulu's high inflation environment, it would be beneficial if the H-CPI were published more often than semiannually. (The US-CPI is released monthly. In prior years, the H-CPI was released every two months, and before that, every quarter.) With such an infrequent reporting schedule, it is difficult to gauge price shock impacts on local inflation. Examples of such shocks include crop failures' impact on food prices, oil disruptions' impact on energy prices, or even some inflation shocks that are internal and unique to Hawaii. Last year, the US-CPI measured a low 4.4 percent inflation rate following the recovery from the 1989/90 winter chill that destroyed many mainland food crops and a high 6.3 percent inflation rate following the invasion of Kuwait. Honolulu did not get the news of the December 1989 mainland freeze's impact until the first half 1990 inflation figure was published in August 1990, and Honolulu had to wait until the February 1991 release of the second half 1990 figure for the local impact of the August oil shock.

Because housing has impacted the inflation rate the most, of the three largest components it is the leading culprit in explaining local inflation.

Historically, inflation lags the business cycle. Inflation usually increases through the business cycle upswing as a reflection of increased consumer spending and wage rate gains, and this increase may continue into the subsequent recession. Inflation then usually falls during the initial stages of recovery from that recession. Nationally, if the volatile food and energy components are excluded, this relationship has held since the late 1960s.

For Honolulu, the relationship between the H-CPI and the state business cycle is weaker, and this is

good news given strong economic growth here. In spite of the weak tourism conditions of early 1991, Hawaii may not enter recession this year, and other sectors of the economy have been quite strong, especially construction.

National inflation should remain low. The recovery from the recession is generally expected to be weaker than after previous recessions. July's 6.8 percent national unemployment rate indicates slack in the labor market, which will translate into reduced consumer spending. Also, the conspicuous consumption of the 1980s is waning. The baby boom generation will likely save more for their children's education and personal retirement, and with the nation deep in debt, there will be some downward pressure on overall consumption.

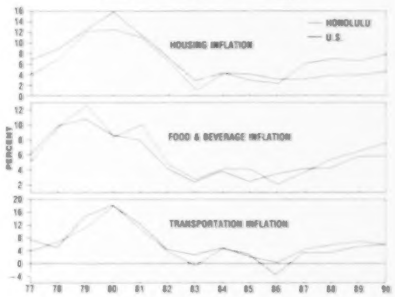
If the historical relationship of the U.S. to Honolulu inflation rates holds, both moving in parallel fashion, it would be possible to develop expectations of the Honolulu inflation rate prior to its release every six months. Also, had it held in the last few years, consumers would not have experienced the huge drop in purchasing power relative to the nation in a short time span. And we could expect that given the slower national inflation environment, local inflation would drop too.

While prices are high in Honolulu, national and local CPIs overestimate inflation somewhat because they are based on a fixed basket of goods. If prices of certain goods increase, the CPIs do not assume any consumer substitution to other less expensive goods.

Hawaii's gross state product (GSP) deflator, and the nation's GNP deflator, measure price movements of the state's and nation's total output, and take into consideration substitution between goods. Yet, Hawaii's GSP deflator is published only annually, and this is also too infrequent to use as an indicator of inflation. The GSP deflator measured a 5.5-percent inflation rate for 1990, versus a 7.3-percent annual figure with the H-CPI. However, the deflator still indicated that Hawaii was 1.4 percentage points higher than the nation.

Analysis. The second graph shows how the three categories that make up over 80 percent of the index compared with their national counterparts. These categories are housing (42.2 percent), food and beverages (20.4 percent), and transportation (16.9 percent).

Inflation Rates: Selected Components
Honolulu vs. U.S. Average



Housing in Hawaii has always been costly, but from 1977 to 1986, housing inflation was relatively less than the national average. It was only since 1986 that housing became an increasingly greater contributor to inflation. This higher inflation reflects shelter cost for renters, homeowners, and visitors, some utilities, furnishing, and operations. In recent years, not only have residents had to deal with higher housing costs overall, those costs have increased at a higher rate. For 1990, local housing inflation was 3.4 percentage points above the nation's.

Inflation from food and beverages has always been higher than the national average. This component covers food at home (cereals and bakery products, meats, poultry, fish, eggs, dairy products, fruits, vegetables, and other foods consumed at home), food consumed away from home, and alcoholic beverages. The graph shows that Honolulu food and beverage inflation will likely always remain volatile relative to the nation's; there have been other times when the increment for this component between the local and national inflation was larger. Last year, food and beverage inflation in Honolulu was 1.8 percentage points higher than the national average.

As shown in the graph, Honolulu's transportation inflation rate has paralleled the national rate the closest. This component measures price movements of private transportation, including motor fuel, and public transportation. Again as with the other components, there has been a divergence since 1986. However, as of 1990 the local transportation inflation was about equal to the nation's—5.8 percent locally versus 5.6 percent nationally.

Because housing has impacted the inflation rate the most, of the three largest components it is the leading culprit in explaining local inflation. Purchases of units at the higher end by foreign investors, increasing population, and a booming economy have all contributed to escalating renters' and homeowners' costs. Yet, unlike the other components, housing's inflationary roots are also the most traceable to local conditions and policies.

Inflation should moderate for 1991, but the spread between Honolulu and national inflation will likely continue.

Outlook. Inflation should moderate for 1991, but the spread between Honolulu and national inflation will likely continue. The tourism slump should lessen inflationary pressures this year, other things equal, because Hawaii is a tourism-dominated economy. This year's drop in the visitor count is only the second such drop in the past 30 years, but so far it is more severe, 0.7 percent in 1980 versus 7.2 percent through June 1991. While the rental market has tightened again after some slack from the deployment of troops to the Persian Gulf, inflationary pressures in the housing resale market have moderated. The labor market has been resilient in the face of the tourism slump, but current economic conditions have put a damper on consumer confidence and spending, which also should lead to lower inflation.

Hawaii Population & Income

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Population			
State residents (thous., Apr. 1, 1990)	1,108.2	.....	.....
de facto	1,248.4	.....	.....
Oahu residents (thous. Apr. 1, 1990)	836.2	.....	.....
de facto	908.0	.....	.....
Maui residents (thous., Apr. 1, 1990)	100.5	.....	.....
de facto	137.3	.....	.....
Hawaii residents (thous., Apr. 1, 1990)	120.3	.....	.....
de facto	135.1	.....	.....
Kauai residents (thous., Apr. 1, 1990)	51.2	.....	.....
de facto	68.0	.....	.....
Military personnel (thous., July 1989)	56.4	.....	–12.0
Civilian dependents	60.3	.....	–13.8
Foreign Immigration (no., yr. to May)	2,452	.....	–0.8
Total Personal Income ($ mil., 1st Qtr. 1991)	23,315	1.3*	7.4
Employment Income	18,028	2.1*	8.4
Manufacturing	663	–22.2*	–1.2
Construction & Mining	1,604	–11.1*	10.9
Wholesale	699	1.2*	2.8
Retail	2,053	–4.2*	6.5
Finance, Ins., & Real Estate	1,401	5.6*	13.9
Trans., Comm., & Utilities	1,511	–0.3*	10.4
Services	5,151	3.7*	11.2
Farm & Other	361	9.4*	–3.7
Federal Civilian	1,135	10.1*	1.5
Federal Military	1,432	11.4*	–0.8
State & Local	2,018	14.7*	14.9
Property Income	3,368	–7.1*	2.6
Transfer Payments: net of personal contributions for social insurance	1,918	11.1*	8.1
Per Capita Personal Income ($, 1989)	18,472	.....	9.7

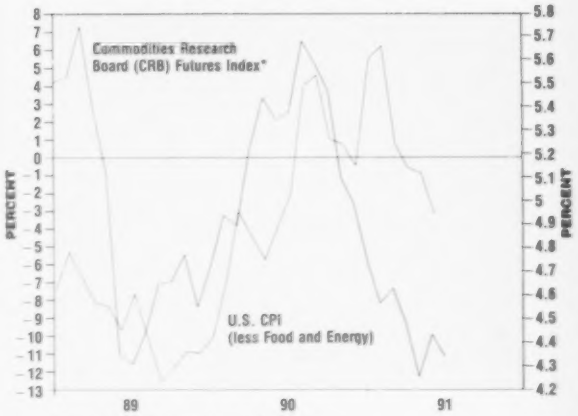
*Annual Rate

International Indicators

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Hawaii Real Trade-Weighted Exchange Rate Index (1980 = 100, June)	112.07	–1.7	4.6
Japan			
Real GNP (yen bil., 3rd qtr.)	443,341	4.1*	5.4
Yen/$ exchange rate (June)	139.79	1.3	–9.1
Current Balance ($ bil., April)	7.77	3.5**	5.8**
Discount rate (%, July)	5.5	–0.5**	0.3**
Long-term prime rate (%, July 1, 1991)	7.7	0.0**	0.1**
Nikkei Stock Index (avg. July)	23,227	–5.3	–25.5
Real GNP/GDP, Other Hawaii Trade Partners (1985 Prices)			
Canada (GDP, bil. C$, 1990)	551.8	–4.1*	–1.0
Australia (GDP, bil. A$, 4Q: 1990)	267.5	2.7*	0.6
New Zealand (GDP, mil. NZ$, 1989)	45,967	.....	1.3
Korea (GDP, bil. won, 4Q: 1990)	38,559	87.4	7.0
Taiwan (GNP, bil. NT$, 3Q: 1990)	943.4	3.2	9.5
Singapore (GDP, mil. SGD, 1989)	52,679	.....	9.2
Philippines (GNP, bil. pesos, 4Q: 1990)	200.98	63.4*	1.8
United Kingdom (GDP, bil. £, 4Q: 1990)	407.72	–3.7*	–1.5
Germany (GNP, bil. DM, 4Q: 1990)	1,872.3	1.5*	4.8

*Annual Rate **Incremental change

Commodity Futures Prices as an Indicator of Overall Inflation



*Seasonally adjusted and smoothed data.

Trends in the CRB Futures Index sometimes predict broader consumer price inflation. The index's recent declines suggest lower forthcoming inflation numbers.

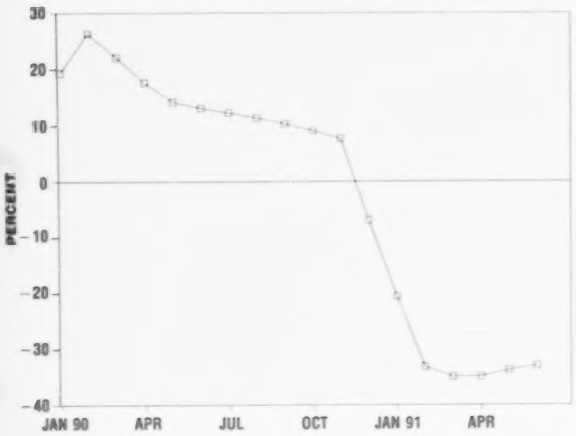
U.S. Economic Indicators

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Gross National Product ($ bil., 2nd Qtr.)	5,620.5p	4.6*	3.3
In 1982 dollars	4,128.4p	0.4*	–0.6
Personal Income (May)	4,778.9p	2.0*	3.4
Real Per Capita Disposable Income (1982 dollars, 1st qtr.)	11,307r	–0.6	–2.4
Productivity Index Nonfarm business secior (1982 = 100, 1st Qtr.)	110.8	0.1	0.1
Civilian Employment (mil., July)	116.7	–0.1	–1.0
Unemployment rate (%, July)	6.8	–0.2**	1.4**
Capacity Utilization (%, May)	78.7p	0.2**	–4.7**
Consumer Confidence Index (1985 = 100, July)	77.7p	2.1	–23.6
Price Indexes			
CPI-U (1982-84 = 100, June)	136.0	2.4*	4.7
PPI-Finished Goods (82 = 100, June)	121.9	2.4*	3.7
Prime Interest Rate (%, June)	8.5	0.0**	–1.5**
Federal funds rate (%, June)	5.9	0.1**	–2.4**
3-Month Treasury bill (%, June)	5.6	0.1**	–2.2**
30-Year Treasury bond (%, June)	8.5	0.2**	0.0**
Money Supply (M2, $ bil., seas. adj., June)	3,398.5p	1.3*	3.3
Domestic Nonfinancial Debt ($ bil., April)	10,578.2p	0.1	5.5
Corporate Profits—After Tax ($ bil., 1st Qtr.)	166.4r	–6.3	–0.4
Common Stock (DJIA, June)	2,968.14	1.4	2.5
Current Balance ($ bil., 1st Qtr.)	10.2p	33.6**	32.9**
Trade Balance ($ bil., 1st Qtr.)	–18.4p	9.3**	9.1**

r = revised p = preliminary *Annual rate **Incremental change

Hawaii Newspaper Agency Help Wanted Index

Smoothed Year-Over-Year Changes



Help wanted advertising has been declining since December, impacted by the Persian Gulf crisis, national economic weakness and the tourism slump. The index seems to have hit bottom in March and April. A rebound in tourism should bring stronger numbers down the road.

Hawaii Banking & Finance

Series/Unit/Period	Level	Percent Change: preceding period	Percent Change: year ago
Commercial Bank Deposits ($ bil., 12-month ending June)			
State Total Deposits	153.0	.....	10.7
Debits to demand deposits	227.0	.....	16.7
Oahu Total Deposits	128.5	.....	12.7
Debits to demand deposits	208.3	.....	17.4
Maui Total Deposits	10.7	.....	7.8
Debits to demand deposits	8.1	.....	8.4
Hawaii Total Deposits	10.7	.....	11.4
Debits to demand deposits	7.2	.....	11.4
Kauai Total Deposits	5.0	.....	9.9
Debits to demand deposits	3.4	.....	7.2
Bank Loans Outstanding ($ mil., 1st Qtr.)			
State	9,383.3	1.0	13.0
Real Estate	4,708.4	5.3	20.9
Consumer	1,255.4	–4.1	–3.0
Commercial & Industrial	2,796.7	–1.1	13.7
Other	537.3	–7.6	8.1
Conventional Home Mortgage Rate			
Honolulu (%, 2nd Qtr.: 1991)	9.2	0.2**	–0.8**
State Tax Collections ($ mil., June)	1,413.8	.....	13.5

***Incremental change*

Hawaii Employment & Jobs

Series/Unit/Period	Level	Percent Change: preceding period	Percent Change: year ago
Civilian Employment (thous., June)			
State Labor Force	565.5p	2.0	4.3
Employment	547.8p	1.7	4.0
Unemployment rate (%)	3.1p	0.3**	0.3**
Oahu Labor Force	407.2p	1.8	3.5
Employment	396.3p	1.5	3.3
Unemployment rate (%)	2.7p	0.3**	0.2**
Maui Labor Force	61.0p	3.1	4.4
Employment	58.7p	2.6	3.4
Unemployment rate (%)	3.7p	0.5**	0.8**
Hawaii Labor Force	66.7p	2.7	8.1
Employment	63.3p	1.9	7.0
Unemployment rate (%)	5.0p	0.7**	0.9**
Kauai Labor Force	30.8p	2.0	8.5
Employment	29.5p	1.7	7.9
Unemployment rate (%)	4.1p	0.3**	0.5**
Job Count by Industry (thous., June)			
Total Jobs—State	589.2p	0.3	2.9
Oahu	444.0p	0.1	0.2
Maui County	56.1p	1.4	0.4
Hawaii	59.7p	0.5	3.9
Kauai	29.5p	0.3	4.6
Sugar (mill & field)	5.6p	1.8	–0.9
Pineapple (cannery & field)	3.7p	15.9	49.0
Diversified Agriculture	9.4p	5.6	16.1
Diversified Manufacturing	16.3p	0.6	–3.3
Durable goods	4.1p	1.2	–3.6
Non-durable goods	12.3p	0.4	–3.5
Apparel & textiles	2.0p	0.0	–15.2
Contract Construction	33.4p	0.5	14.0
Transportation	33.0p	3.0	4.4
Communication	7.3p	0.0	–2.0
Utilities	3.1p	0.0	10.7
Retail Trade	112.7p	0.5	0.4
Wholesale Trade	22.6p	0.2	0.2
Finance, Insurance, & Real Estate	38.0p	0.4	5.4
Hotel Services—State	39.6p	0.3	4.1
Oahu	19.0p	0.3	–3.1
Maui County	9.2p	–3.2	4.0
Hawaii	6.8p	0.0	16.4
Kauai	4.7p	–1.1	22.1
Other Services	118.8p	0.4	5.3
Federal Government	32.5p	0.3	–6.5
Civilian Agencies	13.7p	1.1	–9.9
Defense Department	18.8p	0.0	–3.8
State Government	61.4p	–4.1	5.0
County Government	14.6p	1.0	3.2
Non-Agriculture Self-Employed	38.7p	3.1	1.0

***Incremental change*

Dr. Leroy O. Laney, Vice President and Chief Economist
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Hawaii Business Activity

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
State Gross Business Receipts			
($ mil., year to May)	17,726.0	.....	1.8
Diversified Manufacturing	281.8	.....	–7.5
Diversified Agriculture	132.6	.....	–8.3
Retailing	5,743.5	.....	–1.6
Wholesaling	4,521.8	.....	–1.4
Services	4,295.8	.....	5.1
Construction	1,793.3	.....	16.9
Other	957.3	.....	4.2
Retail Car Sales—State			
(Number, year to June)	19,834	.....	–8.9
Oahu	15,175	.....	–6.9
Maui	1,806	.....	–12.8
Hawaii	2,099	.....	–6.4
Kauai	754	.....	–35.6
Honolulu CPI (1982-84 = 100, 2nd half 1990)			
Urban Wage Earners &			
Clerical Workers	141.6	7.8*	7.3
All Urban Consumers	140.8	7.8*	7.4
Tourism (Number, June)			
Overnight or Longer Visitors	633,520p	13.0	1.8
year to date	3,193,090p	.....	–7.2
Westbound Visitor Count	417,950p	9.0	–1.6
year to date	2,204,480p	.....	–6.9
Oahu	270,520p	8.7	–10.2
year to date	1,412,170p	.....	–9.6
Maui County	175,810p	7.2	–1.3
year to date	933,900p	.....	–7.3
Hawaii	85,970p	2.1	–0.1
year to date	497,010p	.....	–1.3
Kauai	105,140p	4.5	0.7
year to date	532,660p	.....	–4.6
Average Daily Census	134,510p	14.3	–3.0
Average Length of Stay (days)	9.7p	1.7	–1.3
Eastbound Visitor Count	215,570p	21.7	9.1
year to date	988,610p	.....	–7.6
Oahu	205,540p	20.3	7.2
year to date	946,280p	.....	–8.8
Maui County	39,860p	10.5	16.8
year to date	191,510p	.....	1.8
Hawaii	16,190p	–6.3	–15.6
year to date	92,260p	.....	6.1
Kauai	16,770p	11.6	15.0
year to date	83,000p	.....	–3.6
Average Daily Census	43,690p	28.0	18.4
Average Length of Stay (days)	6.1p	1.3	8.6
Hotel Occupancy Rate—State			
(%, June)	74.6	5.9**	–5.3**
year to date	69.3	.....	–11.4**
Oahu	83.9	9.5**	–5.6**
year to date	75.5	.....	–12.6**
Maui Island	65.6	2.3**	–1.8**
year to date	62.7	.....	–9.4**
Hawaii	52.2	–3.4**	–2.8**
year to date	57.6	.....	–7.4**
Kauai	59.2	–1.4**	–4.8**
year to date	56.3	.....	–10.9**

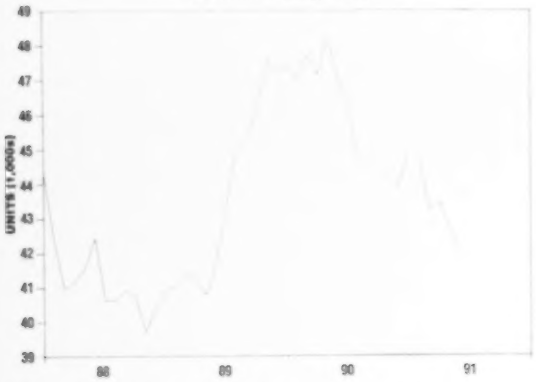
*p = preliminary *Annual rate **Incremental change*

Hawaii Business Activity *(Cont.)*

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Defense Appropriations			
Total Funds ($ mil., 1990)	1,927[1]	.....	3.8
Military payroll	930[1]	.....	6.7
Civilian payroll	630[1]	.....	–0.3
Local purchases	367[1]	.....	4.3
Agriculture (Year to May)			
Sugar Production (thous. tons)	207.5	.....	–14.5
Price per ton	429.20	.....	–8.3
Pineapple Production (thous. tons)	111,394	.....	9.2
Honolulu Construction Cost Indexes (June)			
Single Family (1982 = 100)	149.6	.....	4.9
High Rise (1982 = 100)	146.9	.....	6.1
Private Permits ($ thous., year to June)			
State Residential	928,651	.....	44.9
Nonresidential	338,054	.....	7.2
Oahu Residential	627,687	.....	106.1
Nonresidential	238,771	.....	28.8
Maui County Residential	68,612	.....	–31.5
Nonresidential	36,495	.....	–31.7
Hawaii Residential	186,120	.....	18.4
Nonresidential	33,018	.....	6.8
Kauai Residential	46,230	.....	–41.5
Nonresidential	29,095	.....	–36.1
Public Contracts Awarded			
State ($ thous., year to June)	349,942	.....	48.1
Oahu	277,787	.....	86.1
Maui County	33,794	.....	–9.9
Hawaii	16,178	.....	–9.9
Kauai	22,052	.....	–30.2
By Level of Government			
Federal	56,924	.....	88.2
State	220,975	.....	82.9
County	72,043	.....	–15.5
Real Estate Resales (June)			
State: Single Family (number)	289	.....	–26.5
Average price	344,716	.....	–14.5
Condominium (number)	341	.....	–53.5
Average price	217,987	.....	–9.1
Oahu: Single Family (number)	168	.....	–21.5
Average price	400,843	.....	–21.5
Condominium (number)	277	.....	–45.8
Average price	223,480	.....	–8.5
Maui County: Single Family (number)	45	.....	–23.7
Average price	330,377	.....	–24.5
Condominium (number)	31	.....	–79.2
Average price	207,811	.....	–21.5
Hawaii: Single Family (number)	62	.....	–37.4
Average price	215,691	.....	24.2
Condominium (number)	26	.....	–51.9
Average price	186,804	.....	24.0
Kauai: Single Family (number)	14	.....	–33.3
Average price	288,686	.....	–1.7
Condominium (number)	7	.....	–63.2
Average price	161,500	.....	–10.1

*p = preliminary *Annual rate **Incremental change [1] = Does not include Air Force*

Hawaii Retail Car Sales
12-Month Moving Total



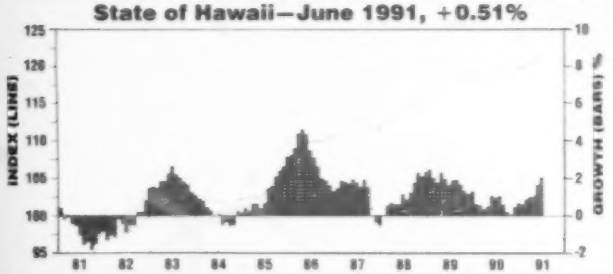
Retail car sales started to turn down in early 1990, about the time other major purchases such as real estate resales began to decline. Because the stock of automobiles on the road was newer after strong sales in 1989, a leveling might be expected. But a weaker economy also contributed.

Hawaii Public Assistance

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Unemployment Insurance (May)			
Insured Unemployment (wkly. avg.)	7,564	−19.0	42.7
Intrastate Initial Claims	5,705	54.0	49.6
Interstate Initial Claims	203	−32.6	1.5
Benefits ($ thous., year to date)	32,715	.....	55.2
Income Maintenance (May)			
Recipients (no. persons)	55,510	0.7	6.0
Payments ($ thous., year to date)	57,348	.....	8.9
Medical Assistance (April)			
Recipients (no. persons)	50,293	−10.9	11.1
Payments ($ thous., year to date)	84,821	.....	20.1
Food Stamps (April)			
Recipients (no. persons)	84,038	1.6	5.4
Payments ($ thous., year to date)	33,252	.....	22.4
Services (1st qtr.)			
Recipients (no. cases)	6,476	−0.9	7.0
Payments ($ thous., year to date)	4,136	.....	−59.4

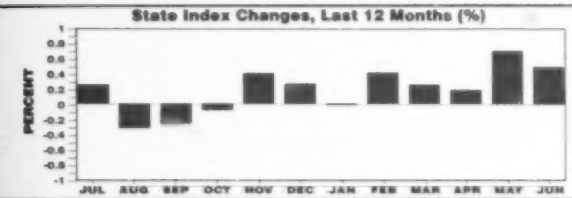
First Hawaiian Bank Index of Leading Economic Indicators

State of Hawaii—June 1991, +0.51%



The First Hawaiian Bank Index of Leading Economic Indicators increased by 0.6 percent for June, the fifth consecutive monthly increase. The credit demand component increased the most, followed by two components that gauge the workplace—average workweek hours, and labor market conditions as proxied by initial unemployment claims. Average workweek hours are clearly in a rebound after early 1991 declines. The largest declining component was construction; permit activity slowed down in June after strong showings early in the year, with most of weakness in residential permits. At the county level, only the Hawaii County index declined.

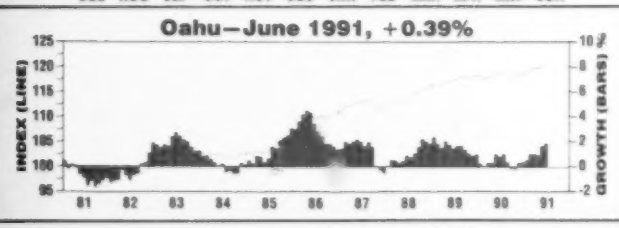
State Index Changes, Last 12 Months (%)



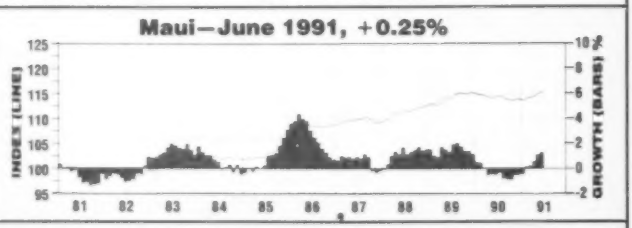
June State Index Component Changes

Credit Demand	+2.94%	Expected Purchasing Power	−0.09%
Average Workweek Hour	+1.74%	Monetary Policy	−0.18%
Labor Market Conditions	+1.15%	Trade-weighted Exchange Rate	−0.43%
National Leading Index	+0.49%	Construction Contracts	−1.18%
Visitor Count	−0.07%		
Hawaii Stock Index	−0.08%		

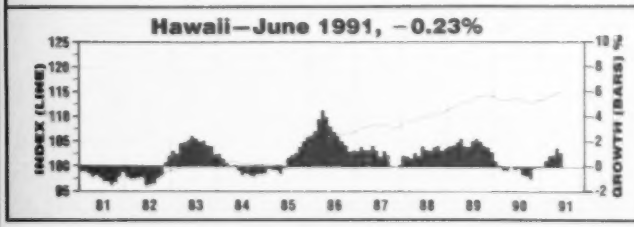
Oahu—June 1991, +0.39%



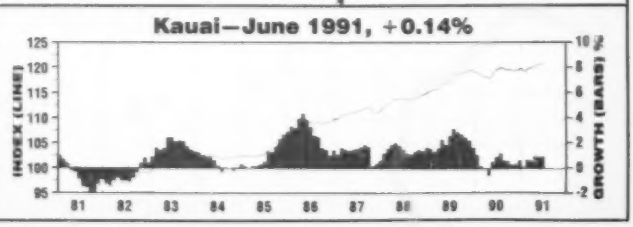
Maui—June 1991, +0.25%



Hawaii—June 1991, −0.23%



Kauai—June 1991, +0.14%



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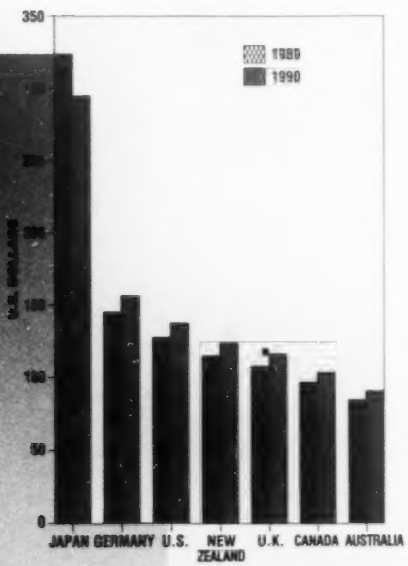
Current Business Trends: Hawaii's Visitor Expenditures

Personal Daily Visitor Expenditures
By Origin of Traveler



New Hawaii Visitors Bureau expenditure figures provide more insight into the state's tourism industry. Despite downward revision of Japanese visitor expenditures, the average Japanese visitor still spent $294 per day in 1990. In a distant second place was the visitor from Germany, closely followed by the American visitor.

The different levels of visitor spending can be attributed partly to travel patterns. Japanese tourists typically take shorter vacations and are accustomed to making the most of each day in Hawaii. Other tourists take longer trips to Hawaii, or Hawaii is just one of other destinations. Hence, for those travelers, spending is stretched over a greater number of days.

Visitor expenditures should increase from year to year due to inflation. However, the foreign visitor also is impacted by exchange rates. From the beginning of 1989 to the middle of 1990, the inflation-adjusted yen weakened against the dollar, reducing the Japanese visitors' purchasing power. The other currencies gained in strength relative to the dollar, or remained flat. This partially explains lower 1990 Japanese spending, compared to increases for all other countries.

The significance of travel patterns and exchange rate swings is critical.

The significance of travel patterns and exchange rate swings is critical. There is growing sentiment in Japan for more leisure, and longer vacations may come into vogue. If they take longer vacations in Hawaii, or if the islands become a stopover, then expenditures could decline a notch. Exchange rate variations could also make expenditures volatile.

U.S. mainland visitors will remain important. Their total visitor expenditures are not low considering their longer stays, and their spending should be more stable since exchange rate swings do not play a direct role.

NOTE

Some charts and graphs were color-coded in the original document. While it has not been possible to reproduce these items in color, their equivalent values on the black-and-white scale are often distinct enough to convey the same information as the original colors.

Congressional Information Service, Inc.
4520 East-West Highway
Bethesda, Maryland 20814

ECONOMIC INDICATORS

Research Department
First Hawaiian Bank
September/October 1991

Global Shocks and the Hawaii Economy

For the past two years, August has brought a rude shock for the world economy. This year's crisis, an attempted coup in the Soviet Union, scared Hawaii along with the rest of the world. Last August's Kuwait invasion later had a telling effect on isle tourism. With such a recent experience still in mind, we did not need convincing that faraway developments could not be ignored for their local effects.

These shocks can have a much greater impact than daily economic statistics, and they are harder to forecast. They underline the vulnerability of an isolated island economy dependent on long-distance travel, airfares, and imports of energy as well as other critical items. Can we make any generalizations concerning the effect of these shocks on the Hawaii economy?

International crises typically are accompanied by several economic effects. Unless the shock reflects adversely on the United States itself, the U.S. economy usually plays a safe-haven role. U.S. interest rates may be lower than they would be otherwise due to the movement of funds into dollar-denominated assets. (Yet sometimes, if the crisis fans inflationary expectations, long-term interest rates can actually move higher.) These inflows usually mean a stronger U.S. currency, which can hurt our exports, including foreign tourism spending here. The dollar often moves counter to all foreign currencies, regardless of the origin of the shock.

Major markets are generally much more volatile for the duration of the crisis; this applies to financial markets as well as oil and commodity markets. People are often more reluctant to travel for business or pleasure during and shortly after the crisis, an effect felt acutely in Hawaii's economy.

Obviously geography can dictate the most affected areas. Yet equity markets declined steeply with initial news of the Soviet crisis in all market economies.

These shocks . . . underline the vulnerability of an isolated island economy dependent on long-distance travel, airfares, and imports of energy as well as most other critical items.

Hawaii's tourism can benefit from unrest on the other side of the globe, but this certainly did not apply during last year's war-related contraction. Hawaii's economy remains most affected by the U.S. mainland and Japan, and fortunately these are two of the world's most stable nations politically.

Events like Gorbachev's attempted overthrow are initially most detrimental for the pure uncertainty they cause. Was perestroika relegated to history? Was the vaunted "New World Order" careening? Was the world economy threatened by renewed recession? Were recent U.S. defense budget decisions subject to profound revision? These premonitions were brief, but they were enough to temporarily provoke great uncertainty indeed.

Correctly predicting the direction that economic variables will move is of secondary importance in such situations, because this exercise is overshadowed simply by increased variation in sensitive markets. For example, on the breaking news of Soviet unrest, precious metal prices first moved up as a haven investment, then dropped on speculation about Soviet sales to raise hard currency. Energy markets and world stock markets also showed, as usual, much greater volatility but ambiguous direction. Major consumer and investment decisions are just less likely to be made in times of such uncertainty.

In the current environment, negative impacts of uncertain world events are still likely to reach Hawaii's economy via the U.S. mainland. The U.S. economy is now attempting to recover from recession, but for a number of reasons that recovery will be weak. High debt levels, a fragile financial industry, and demographic trends encouraging higher savings are just a few of the often mentioned reasons why—even after the national recession is well behind us—the 1990s may offer slower growth than previous decades.

The U.S. economy is thus more vulnerable now to global shocks, because it takes less to throw its lower growth economy into recession. And it is quite clear from the past that Hawaii's westbound tourism is impacted by the mainland economy.

The state economy is also more likely now to feel these shocks than in much of its past history. We will be more or less exposed depending on the nature and location of the shock. The transmission is quite different from the days when the state economy was oriented more toward agriculture and defense, but the effects are potentially more direct and immediate. These global shocks will continue to surface, but on the brighter side the world may now be moving in a direction in which they are less likely.

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Job Creation in Hawaii

An important factor in judging the strength of an economy is how well it creates employment for its residents. The state has often been criticized for not creating enough employment opportunities in high-skilled occupations. Without these, there is a "brain drain" out of the state.

However, Hawaii has performed well in creating total jobs. Over the past several years, many more opportunities were created for those who seek employment. Despite a predominantly service economy, usually associated with lower wages, the state was ranked tenth in the nation at $20,254 in the level of per capita personal income for 1990. The published (non-seasonally adjusted) unemployment rate increased a notch this past June, but this was due mainly to summer's seasonal factors. Hawaii still has one of the lowest unemployment rates in the nation.

The other side of the labor market concerns how well Hawaii's labor force satisfies the needs of employers. Two factors that determine economic growth and higher standards of living for society are the quality and quantity of labor. Based on the level of state economic growth over the past several years, Hawaii's labor force has somehow come through for the economy.

Employment Trends. The U.S. Department of Labor recently released the *1990 Geographic Profile of Employment and Unemployment,* which contains some revealing data on the state's labor market. The table shows the state's labor force participation rates, which reflect the percent of the noninstitutional population 16 years and over in the civilian labor force. Participation rates can be volatile year to year, but the total has been trending upward. This uptrend is attributable largely to the participation rate for women.

Part of the reason for the higher female rate may be due to demographic trends. Both marriage and child bearing are coming later.

A second reason for higher overall participation rates is likely to be due simply to meeting economic need. Hawaii has a history of being a high cost-of-living state. With a larger spread between mainland and local inflation, living costs were rising faster here during the later half of the 1980s than on the mainland. (See *Economic Indicators,* July/August 1991.)

The Unemployment Rate & Multiple Jobholdings
Seasonally Adjusted, Smoothed

Labor Force Participation Rates

	Total	Men	Women
1980	63.8	72.0	56.7
1981	66.7	74.9	59.5
1982	66.8	75.5	59.9
1983	66.8	75.1	59.1
1984	65.5	73.5	58.1
1985	65.5	72.6	59.1
1986	66.1	73.8	59.0
1987	67.4	75.3	60.4
1988	66.8	74.3	60.0
1989	66.4	74.1	59.9
1990	67.1	74.5	60.6

State unemployment rates, which have been trending down for decades, are also evidence of an increasingly tight labor market and cumulating pressure to stay even with inflation. Last year, 2.8 percent of the labor force was without jobs. By sex, 3.3 percent of the men and 2.3 percent of the women were unemployed. This compared with a 5.5-percent national unemployment rate—5.6 and 5.4 percent, respectively, for men and women.

Given higher labor force participation rates and lower unemployment rates, employers are more willing to accommodate part-time employment. But, while part-time employment opportunities have been created, actual part-time employment last year was at the lowest rate in ten years. In 1990, 16 percent of those employed were on a part-time basis - that is, working 34 hours or less a week. As recently as 1987, the part-time employment rate was 20 percent. Hence, if there has been a proliferation of part-time job opportunities, then more of those employed likely have been holding more than one part-time job, so that they actually work full-time.

Multiple Jobholdings. One of the characteristics of Hawaii's employment environment is the increase in multiple jobholdings. It is natural for some residents to take advantage of the high demand for labor created by the booming state economy, by taking on a second job to assist in making ends meet.

Despite a predominately service economy, usually associated with lower wages, the state was ranked tenth in the nation at $20,254 in the level of per capita personal income for 1990.

The pulse of the labor market is measured by two competing and independent surveys. One is the household survey, which tracks the labor market without considering multiple jobholdings. In this survey, persons having more than one job are counted only once, and it is from this series that the monthly unemployment rate is calculated. The other is the establishment survey, in which persons with more than one nonfarm wage and salary job are counted in as many jobs as they have. It is from this series that the job count is calculated.

Because these two surveys are independent, growth rates can differ. For example, between 1985 and 1990,

the household survey indicated an average annual growth rate of employment of 3.2 percent. The establishment survey, however, indicated a job count growth rate of 4.5 percent. This discrepancy can be explained by multiple jobholding.

While a survey specifically designed to measure multiple jobholding is preferred, we can approximate it by comparing the differences in the employment measures of the two surveys. The multiple job rate illustrated in the graph is the difference in the two measures divided by the number of employed persons, from 1982 to present. (The household survey was last rebenchmarked in 1982 to reflect the 1980 Census. In terms of the state's business cycle, 1982 was also the last recession period.) This series is compared with the state unemployment rate. Both data series have been seasonally adjusted and smoothed.

We would expect an inverse relationship between the two. The graph does show that the multiple jobholding rate recently reached a record high, while the unemployment rate was declining. (Less intuitively, there was a period in 1986 to 1987 when both multiple jobholding and unemployment declined.) The labor market has been tight; the 3.1 percent unemployment rate for June 1991 passed 3.0 percent for the first time since March 1990. Based on multiple jobholding, the labor market seemed to have developed some slack since late last year, because multiple jobholdings have been decreasing. The downturn in tourism in early 1991 was a major factor in the decline. The unemployment rate, however has been insulated because the loss of only one job still keeps some people employed.

In the past several years, the state partially overcame the labor shortage with more multiple jobholdings. More opportunities have opened up for women, the elderly and the handicapped. While creating employment opportunities for residents is a sign of a healthy economy, relying on multiple jobholdings for economic growth is not a stable solution to a labor shortage.

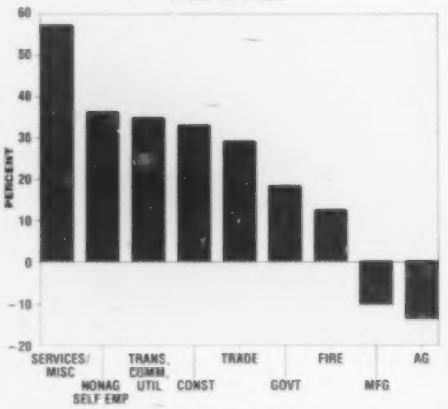
The reason for both high multiple jobholdings and the upward trend in labor force participation is Hawaii's increasingly acute labor shortage. Labor flows more freely between the contiguous states, and Hawaii's high cost-of-living is a deterrent to attracting people from the mainland.

Profile of Jobs. Hawaii's economy also is more conducive to multiple jobholding. Part-time employment occurs less frequently in construction and manufacturing, but is more prevalent in retail, hotel and other service industries, especially in firms that operate during day and evening hours. The bar graph shows the job growth rate of various industries during the 1980s. Service industry jobs, which include hotel and health industry jobs, increased by 57 percent, or almost six percent annually. The construction sector, transportation, communications and utilities sectors—as well as the nonagricultural self-employed—also experienced sizeable job gains. The finance, insurance and real estate sector, government, and trades—wholesale and retail—had lower rates of growth. Manufacturing and agriculture both experienced declines.

In the past several years, the state partially overcame the labor shortage with more multiple jobholdings . . . (but) relying on multiple jobholdings for economic growth is not a stable solution to a labor shortage.

In spite of massive job count growth in many industries, only services experienced large gains in the share of total jobs share between 1980 and 1990. The service industry accounted for 22 percent of total jobs in 1980, and 27 percent in 1990. Hotel jobs, which are

State Employment Growth by Industry
1980 to 1990



part of services, increased from six percent to seven percent.

Other industries' share of the job count did not show robust growth during the past decade.Construction, which has been booming since 1985, declined from five percent in 1980 to three percent in 1984, and rebounded to almost six percent in 1990. The transportation, communications and utilities sector has accounted for around seven percent of total jobs. The wholesale and retail trade sector remained at 23 to 24 percent. The total government job share declined from 20 percent to 18 percent. Other industries—such as manufacturing, finance, insurance, real estate and agriculture—experienced declines in jobcount share.

Conclusion. Hawaii's answer in overcoming an acute labor shortage has been an increase in multiple jobholdings. A big growth in service sector jobs has created ample second job opportunities, helping residents combat the high cost-of-living. Yet multiple job holding alone cannot continue to serve as a solution for a growing economy.

The labor force participation rate is on an upward trend overall. The participation rate of women is at a very high level, and unlike the usual case in many economies, the unemployment rate for women is lower than for men.

Hawaii Population & Income

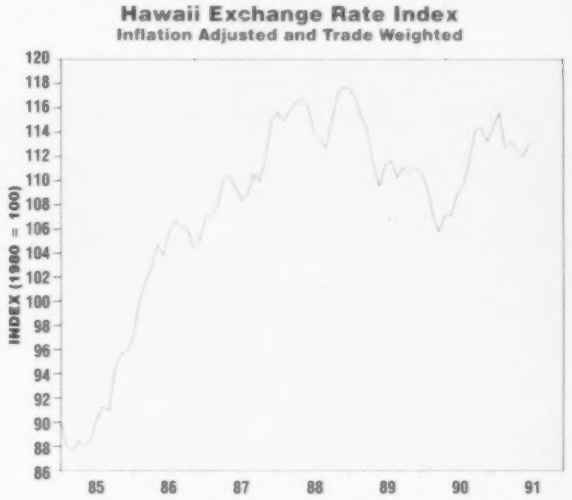
Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Population			
State residents (thous., Apr. 1, 1990)	1,108.2	.....	.....
de facto	1,248.4	.....	.....
Oahu residents (thous., Apr. 1, 1990)	836.2	.....	.....
de facto	908.0	.....	.....
Maui residents (thous., Apr. 1, 1990)	100.5	.....	.....
de facto	137.3	.....	.....
Hawaii residents (thous., Apr. 1, 1990)	120.3	.....	.....
de facto	135.1	.....	.....
Kauai residents (thous., Apr. 1, 1990)	51.2	.....	.....
de facto	68.0	.....	.....
Military personnel (thous., July 1989)	56.4	.....	-12.0
Civilian dependents	60.3	.....	-13.8
Foreign Immigration (no., yr. to May)	2,452	.....	-0.8
Total Personal Income			
($ mil., 1st Qtr. 1991)	23,315	1.3*	7.4
Employment Income	18,028	2.1*	8.4
Manufacturing	663	-22.2*	-1.2
Construction & Mining	1,604	-11.1*	10.9
Wholesale	699	1.2*	2.8
Retail	2,053	-4.2*	6.5
Finance, Ins., & Real Estate	1,401	5.6*	13.9
Trans., Comm., & Utilities	1,511	-0.3*	10.4
Services	5,151	3.7*	11.2
Farm & Other	361	9.4*	-3.7
Federal Civilian	1,135	10.1*	1.5
Federal Military	1,432	11.4*	-0.8
State & Local	2,018	14.7*	14.9
Property Income	3,368	-7.1*	2.6
Transfer Payments: net of personal contributions for social insurance	1,918	11.1*	8.1
Per Capita Personal Income ($, 1989)	18,472	.....	9.7

*Annual Rate

International Indicators

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Hawaii Real Trade-Weighted Exchange Rate Index (1980 = 100, July)	113.01	0.9	3.7
Japan			
Real GNP (yen bil., 1st qtr.)	421,068	11.2*	5.9
Yen/$ exchange rate (June)	139.79	1.3	-9.1
Current Balance ($ bil., May)	4.27	-3.5**	2.9**
Discount rate (%, July)	5.5	-0.5**	0.3**
Long-term prime rate (%, May 1, 1991)	7.7	0.0**	0.1**
Nikkei Stock Index (avg. July)	23,227	-5.3	-25.5
Real GNP/GDP, Other Hawaii Trade Partners (1985 Prices)			
Canada (GDP, bil. C$, 1Q: 1991)	541.8	-4.6*	-2.8
Australia (GDP, bil. A$, 1Q: 1991)	266.6	0.1*	-0.4
New Zealand (GDP, mil. NZ$, 1989)	45,967	.....	1.3
Korea (GDP, bil. won, 1990)	121,734	.....	9.0
Taiwan (GNP, bil. NT$, 3Q: 1990)	943.4	3.2*	9.5
Singapore (GDP, mil. SGD, 1989)	57,074r	.....	8.2
Philippines (GNP, bil. pesos, 1Q: 1991)	179.9	-40.7*	0.2
United Kingdom (GDP, bil. £, 4Q: 1990)	407.72	-3.7*	-1.5
Germany (GNP, bil. DM, 4Q: 1990)	1,872.3	1.5*	4.8

*Annual Rate **Incremental change



Hawaii's export-weighted exchange rate index is sensitive to both world economic and political events. The Japanese yen, weighted 75% in the index, with its large 1985-88 appreciation was a big factor in higher Japanese investment and tourism in Hawaii. Since, the index has moved in a more narrow range.

U.S. Economic Indicators

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Gross National Product			
($ bil., 2nd Qtr.)	5,615.8r	4.2*	3.2
In 1982 dollars	4,123.0r	-0.1*	-0.8
Personal Income (June)	4,802.6p	1.9*	3.5
Real Per Capita Disposable Income (1982 dollars, 2nd qtr.)	11,323r	0.1	-2.1
Productivity Index Nonfarm business sector (1982 = 100, 2nd Qtr.)	111.8	0.5	0.4
Civilian Employment (mil., July)	116.7	-0.2	-1.0
Unemployment rate (%, July)	6.8	-0.2**	1.4**
Capacity Utilization (%, June)	79.3p	0.3**	-4.5**
Consumer Confidence Index (1985 = 100, August)	76.3p	-1.8	-9.9
Price Indexes			
CPI-U (1982-84 = 100, July)	136.2	2.4*	4.4
PPI-Finished Goods (82 = 100, July)	121.6	-2.4*	2.9
Prime Interest Rate (%, July)	8.5	0.0**	-1.5**
Federal funds rate (%, July)	5.8	-0.1**	-2.3**
3-Month Treasury bill (%, July)	5.6	0.0**	-2.0**
30-Year Treasury bond (%, July)	8.5	0.0**	-0.1**
Money Supply (M2, $ bil., seas. adj., July)	3,388.0	3.7*	2.8
Domestic Nonfinancial Debt ($ bil., May)	10,627.3p	0.5	5.5
Corporate Profits—After Tax ($ bil., 1st Qtr.)	166.4r	-6.3	-0.4
Common Stock (DJIA, July)	2,975.97p	0.3	1.4
Current Balance ($ bil., 1st Qtr.)	10.2p	33.6**	32.9**
Trade Balance ($ bil., 1st Qtr.)	-18.4p	9.3**	9.1**

r = revised p = preliminary *Annual rate **Incremental change

State Average Daily Hotel Room Rate
Price Increases

In spite of an improving visitor count, hotel occupancies have been low. Increased competition in the hotel industry is reflected in growth rates of the state average daily hotel room rate shown here. Tourism thus has continued to be affected by the slump that began earlier this year.

Hawaii Banking & Finance

Series/Unit/Period	Level	Percent Change: preceding period	Percent Change: year ago
Commercial Bank Deposits ($ bil., 12-month ending July)			
State Total Deposits	153.4	.....	9.5
Debits to demand deposits	229.6	.....	16.0
Oahu Total Deposits	128.9	.....	11.4
Debits to demand deposits	211.0	.....	16.9
Maui Total Deposits	10.7	.....	6.4
Debits to demand deposits	8.0	.....	5.1
Hawaii Total Deposits	10.7	.....	9.6
Debits to demand deposits	7.2	.....	8.2
Kauai Total Deposits	5.0	.....	9.1
Debits to demand deposits	3.4	.....	6.3
Bank Loans Outstanding ($ mil., 2nd Qtr.)			
State	9,659.6	2.9	12.1
Real Estate	4,897.0	4.0	18.2
Consumer	1,210.1	−3.6	−7.8
Commercial & Industrial	2,905.0	3.9	14.6
Other	544.6	1.4	8.3
Conventional Home Mortgage Rate			
Honolulu (%, 2nd Qtr.: 1991)	9.18	0.22**	−0.8**
State Tax Collections ($ mil., July)	1,640.7	.....	12.3

**Incremental change*

Hawaii Employment & Jobs

Series/Unit/Period	Level	Percent Change: preceding period	Percent Change: year ago
Civilian Employment (thous., July)			
State Labor Force	562.2p	−0.6	4.1
Employment	546.6p	−0.2	4.2
Unemployment rate (%)	2.8p	−0.3**	0.0**
Oahu Labor Force	403.6p	−0.9	3.6
Employment	394.3p	−0.6	3.9
Unemployment rate (%)	2.3p	−0.4**	−0.3**
Maui Labor Force	60.9p	0.0	3.7
Employment	58.8p	0.3	3.1
Unemployment rate (%)	3.4p	−0.3**	0.6**
Hawaii Labor Force	66.7p	0.2	6.0
Employment	63.8p	0.8	5.7
Unemployment rate (%)	4.4p	−0.6**	0.3**
Kauai Labor Force	30.9p	0.5	7.3
Employment	29.7p	0.7	7.4
Unemployment rate (%)	3.9p	−0.2**	−0.1**
Job Count by Industry (thous., July)			
Total Jobs—State	590.3p	0.1	3.2
Oahu	443.5p	−0.2	0.9
Maui County	56.5p	0.7	0.4
Hawaii	60.5p	1.3	3.2
Kauai	29.8p	1.2	4.6
Sugar (mill & field)	5.6p	0.9	−2.6
Pineapple (cannery & field)	3.9p	6.8	2.6
Diversified Agriculture	9.8p	4.8	6.5
Diversified Manufacturing	16.4p	0.0	−2.7
Durable goods	4.1p	0.0	−2.4
Non-durable goods	12.3p	0.4	−2.8
Apparel & textiles	2.0p	0.0	−11.4
Contract Construction	33.6p	0.9	15.1
Transportation	32.0p	0.0	0.5
Communication	7.3p	0.7	−1.4
Utilities	3.2p	0.0	10.5
Retail Trade	114.3p	1.0	0.7
Wholesale Trade	22.6p	0.2	0.2
Finance, Insurance, & Real Estate	38.1p	0.4	5.4
Hotel Services—State	39.7p	0.4	4.7
Oahu	19.0p	0.3	−2.3
Maui County	9.1p	−1.1	3.4
Hawaii	6.8p	1.5	18.1
Kauai	4.8p	1.1	25.0
Other Services	119.6p	0.8	5.7
Federal Government	32.7p	0.6	−5.3
Civilian Agencies	13.9p	1.1	−9.7
Defense Department	18.8p	0.3	−1.8
State Government	54.1p	−11.8	3.5
County Government	16.9p	15.8	7.3
Non-Agriculture Self-Employed	40.5p	4.7	3.7

**Incremental change*

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Hawaii Business Activity

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
State Gross Business Receipts			
($ mil., year to June)	21,202.3	.....	2.7
Diversified Manufacturing	332.7	.....	–9.7
Diversified Agriculture	162.0	.....	–5.1
Retailing	6,915.2	.....	0.3
Wholesaling	5,348.0	.....	–1.0
Services	5,118.7	.....	5.7
Construction	2,201.2	.....	17.7
Other	1,124.4	.....	2.9
Retail Car Sales—State			
(Number, year to July)	23,073	.....	–8.1
Oahu	17,667	.....	–5.9
Maui	2,119	.....	–10.5
Hawaii	2,390	.....	–8.4
Kauai	897	.....	–34.5
Honolulu CPI (1982-84 = 100, 1st half 1991)			
Urban Wage Earners &			
Clerical Workers	147.7	8.6*	8.4
All Urban Consumers	146.8	8.5*	8.3
Tourism (Number, July)			
Overnight or Longer Visitors	688,040p	8.6	2.8
year to date	3,881,130p	.....	–5.5
Westbound Visitor Count	449,400p	7.5	1.6
year to date	2,653,880p	.....	–5.6
Oahu	285,670p	5.6	–9.8
year to date	1,697,840p	.....	–9.6
Maui County	182,800p	4.0	–0.9
year to date	1,116,700p	.....	–6.3
Hawaii	101,690p	18.3	16.0
year to date	598,700p	.....	1.3
Kauai	100,510p	–4.4	–5.5
year to date	633,170p	.....	–4.7
Average Daily Census	141,630p	5.3	0.3
Average Length of Stay (days)	9.8p	1.0	–1.0
Eastbound Visitor Count	238,640p	10.7	5.2
year to date	1,227,250p	.....	–5.4
Oahu	228,090p	11.0	4.8
year to date	1,174,370p	.....	–6.5
Maui County	40,730p	2.2	11.1
year to date	232,240p	.....	3.3
Hawaii	20,960p	29.5	10.5
year to date	113,220p	.....	6.9
Kauai	16,640p	–0.8	18.9
year to date	99,640p	.....	–0.5
Average Daily Census	47,960p	9.8	0.8
Average Length of Stay (days)	6.2p	1.6	–4.6
Hotel Occupancy Rate—State			
(%, July)	79.5	4.9**	–2.0**
year to date	70.8	.....	–10.0**
Oahu	86.5	2.6**	–3.5**
year to date	77.1	.....	–11.3**
Maui Island	71.5	5.9**	–0.6**
year to date	64.0	.....	–8.1**
Hawaii	65.7	13.5**	9.9**
year to date	58.6	.....	–5.2**
Kauai	66.9	21.2**	–6.6**
year to date	57.8	.....	–10.1**

*p = preliminary *Annual rate **Incremental change*

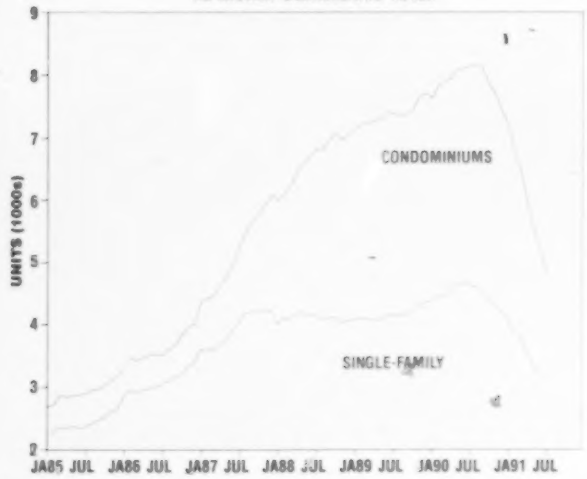
Hawaii Business Activity *(Cont.)*

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Defense Appropriations			
Total Funds ($ mil., 1Q: 1991)	499.7[1]	.....	2.2
Military payroll	234.3[1]	.....	–0.7
Civilian payroll	171.0[1]	.....	6.2
Local purchases	94.4[1]	.....	2.8
Agriculture (Year to July)			
Sugar Production (thous. tons)	402.1	.....	–14.4
Price per ton	428.40	.....	–8.4
Pineapple Production (thous. tons)	142,128	.....	–6.4
Honolulu Construction Cost Indexes (June)			
Single Family (1982 = 100)	148.9	.....	1.7
High Rise (1982 = 100)	146.2	.....	1.7
Private Permits ($ thous., year to July)			
State Residential	1,012,816	.....	38.2
Nonresidential	505,318	.....	34.6
Oahu Residential	670,472	.....	93.0
Nonresidential	392,022	.....	69.6
Maui County Residential	79,428	.....	–33.2
Nonresidential	38,798	.....	–34.2
Hawaii Residential	205,867	.....	20.0
Nonresidential	42,425	.....	13.5
Kauai Residential	57,046	.....	–40.1
Nonresidential	31,458	.....	–34.2
Public Contracts Awarded			
State ($ thous., year to July)	388,025	.....	–14.2
Oahu	302,541	.....	–10.6
Maui County	37,830	.....	–31.5
Hawaii	22,482	.....	–5.0
Kauai	36,117	.....	4.4
By Level of Government			
Federal	57,244	.....	79.2
State	244,673	.....	–23.0
County	75,033	.....	–26.7
Real Estate Resales (July)			
State: Single Family (number)	276	.....	–14.6
Average price	357,194	.....	–9.1
Condominium (number)	417	.....	–34.6
Average price	239,205	.....	–0.6
Oahu: Single Family (number)	158	.....	–11.7
Average price	427,914	.....	–17.4
Condominium (number)	312	.....	–26.2
Average price	258,405	.....	5.2
Maui County: Single Family (number)	39	.....	18.2
Average price	350,160	.....	–10.6
Condominium (number)	59	.....	–51.2
Average price	180,895	.....	–32.1
Hawaii: Single Family (number)	63	.....	–35.1
Average price	174,751	.....	0.7
Condominium (number)	25	.....	–59.7
Average price	128,200	.....	–25.5
Kauai: Single Family (number)	16	.....	14.3
Average price	394,343	.....	22.4
Condominium (number)	12	.....	–40.0
Average price	243,541	.....	27.2

*p = preliminary *Annual rate **Incremental change [1] = Does not include Air Force*

State Real Estate Resales

12-Month Cumulative Total



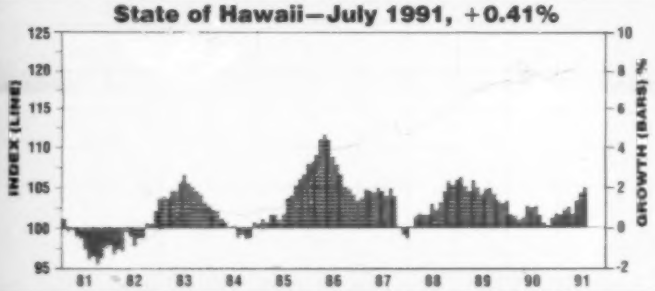
Real estate resales in the state have been in a steep decline since mid-1990. While prices have been soft also, they have not dropped like the number of transactions.

Hawaii Public Assistance

Series/Unit/Period	Level	Percent Change preceding period	Percent Change year ago
Unemployment Insurance (July)			
Insured Unemployment (wkly. avg.)	9,048	20.9	49.9
Intrastate Initial Claims	5,079	8.5	33.3
Interstate Initial Claims	417	90.4	56.2
Benefits ($ thous., year to date)	46,870	.....	58.0
Income Maintenance (July)			
Recipients (no. persons)	56,286	0.9	8.5
Payments ($ thous., year to date)	81,393	.....	9.4
Medical Assistance (June)			
Recipients (no. patients)	51,653	5.1	2.4
Payments ($ thous., year to date)	118,920	.....	5.4
Food Stamps (June)			
Recipients (no. persons)	84,404	0.2	6.9
Payments ($ thous., year to date)	50,256	.....	23.6
Services (2nd qtr.)			
Recipients (no. cases)	5,963	–7.9	–15.1
Payments ($ thous., year to date)	10,185	.....	–45.5

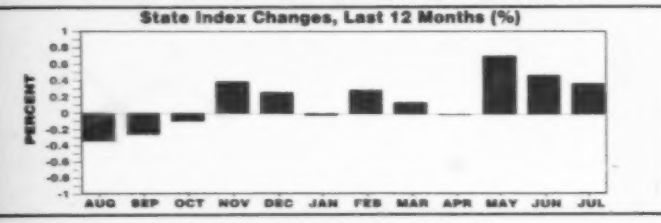
First Hawaiian Bank Index of Leading Economic Indicators

State of Hawaii—July 1991, +0.41%



The First Hawaiian Bank Index of Leading Economic Indicators increased by 0.4 percent for July, the third consecutive monthly increase. (The index for the first half 1991 has been revised to reflect the just-released inflation figure for Honolulu.) This month, seven of the index's 10 components increased. The construction component increased the most, partly due to a major hotel permit issued for Oahu. Other major increases include the national leading index and credit demand component. The largest declining component was average workweek hours. All county level indexes increased.

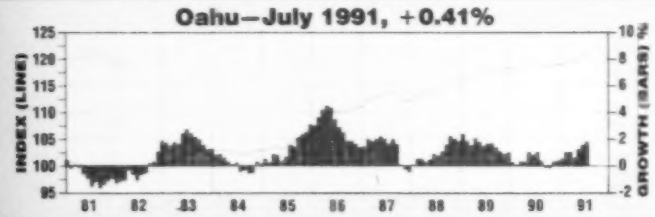
State Index Changes, Last 12 Months (%)



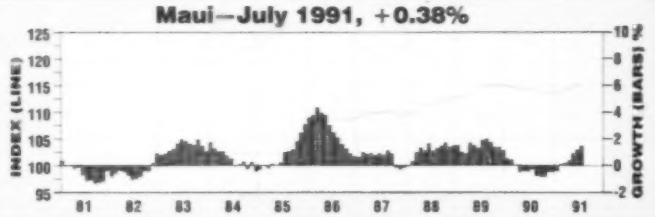
July State Index Component Changes

Construction Contracts	+1.40%	Monetary Policy	+0.12%
National Leading Index	+1.18%	Expected Purchasing Power	+0.03%
Credit Demand	+1.02%	Hawaii Stock Index	–0.14%
Trade-weighted Exchange Rate	+0.86%	Labor Market Conditions	–0.61%
Visitor Count	+0.55%	Average Workweek Hour	–1.91%

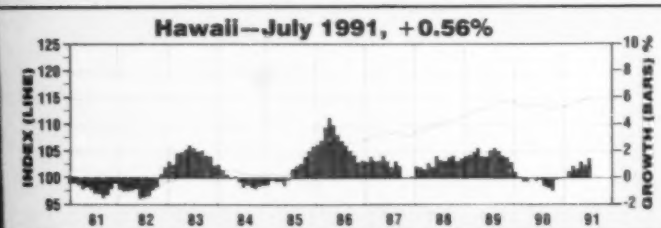
Oahu—July 1991, +0.41%



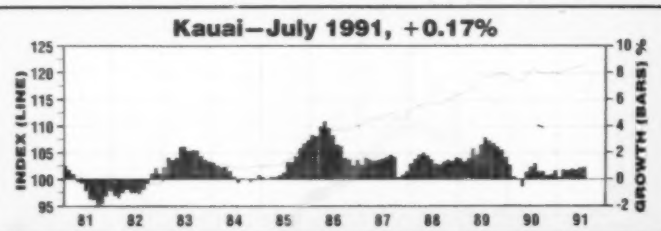
Maui—July 1991, +0.38%



Hawaii—July 1991, +0.56%



Kauai—July 1991, +0.17%



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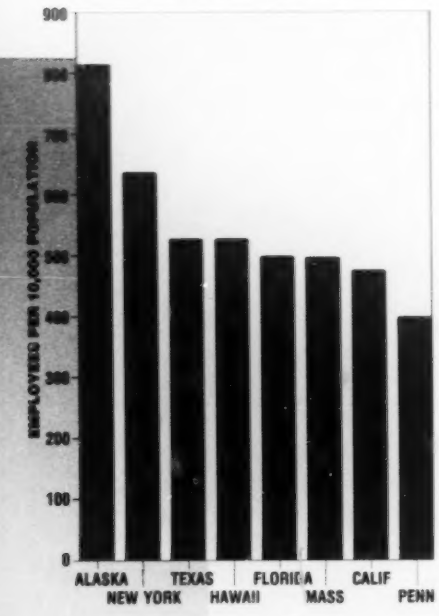
Current Business Trends: Hawaii's Government Employment

State & Local Government Employment
Selected States, 1989



Government is often looked upon as a steady source of employment, but a high level of government jobs is also a target of criticism. This is especially true during times when fiscal prudence is a necessity. Over the past 10 years, Hawaii's government employment increased markedly. State government totaled 57,050 jobs in 1990, an 11,900-job increase over 1980. Hawaii's government jobs are disproportionately state rather than local, due to a centralized state government. During the same period, local government jobs increased by only 500 to 14,400 jobs.

In spite of the increases, the size of Hawaii's government employment relative to its population is not that large when compared with other states. In 1989, Hawaii had 525.4 state and local government employees per every 10,000 persons, ranking the state twenty-first in the nation. The graph compares Hawaii with selected states. It shows that Hawaii's combined state and local governments are relatively

In 1989, Hawaii had 525.4 state and local government employees per every 10,000 persons, ranking the state twenty-first in the nation.

larger than Massachusetts's (rank 36), a small state known for its high level of public service. However, they are also smaller than New York's (ranked third) which is a much larger state.

By these relative employment measures, Hawaii's government sector is not oversized. In fact, between 1980 and 1990, Hawaii's state and local government share of total jobs declined from 13.2 percent to 12.3 percent. Relatively more jobs in government are full-time jobs as opposed to some jobs in the private service sector. Yet based on the number of employees as well as the number of jobs, state and local governments in Hawaii became relatively smaller over the decade.